Service Manual

ORDER NO.
RRV3872

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

SC-LX81
SC-LX71

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
SC-LX81	HDLPWXJ	AC 220 V to 230 V/ 240 V	
SC-LX81	LFXJ	AC 110 V	
SC-LX71	HDLPWXJ	AC 220 V to 230 V/ 240 V	
SC-LX71	LFXJ	AC 110 V	

This service manual should be used together with the following manual(s):

Model	Order No.	Remarks
SC-LX81/HYSXJ5	RRV3841	

For SPECIFICATIONS and PANEL FACILITIES, refer to the operating instructions.

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

©**PIONEER CORPORATION 2008**

T-ZZV SEPT. 2008 Printed in Japan

1. CONTRAST OF MISCELLANEOUS PARTS

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*
- *Nos. indicate the pages and Nos. in the service manual for the base model.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560Ω → 56×10^1 → 561 .... RD1/4PU$\boxed{5}\boxed{6}\boxed{1}$J
47kΩ → 47×10^3 → 473 .... RD1/4PU$\boxed{4}\boxed{7}\boxed{3}$J
0.5Ω → R50 .... RN2H$\boxed{R}\boxed{5}\boxed{0}$K
1Ω → 1R0 .... RS1P$\boxed{1}\boxed{R}\boxed{0}$K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562×10^1 → 5621 .... RN1/4PC$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$F

1.1 CONTRAST TABLE

(2) CONTRAST TABLE

SC-LX81/HYSXJ5, SC-LX81/HDLPWXJ, SC-LX81/LFXJ, SC-LX71/HDLPWXJ and SC-LX71/LFXJ are constructed the same except for the following:

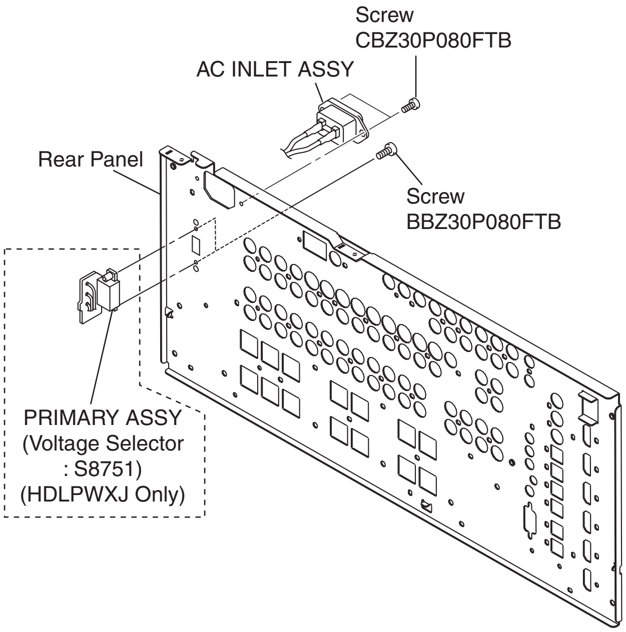
Mark	No.	Symbol and Description	SC-LX81/ HYSXJ5	SC-LX81/ HDLPWXJ	SC-LX81/ LFXJ	SC-LX71/ HDLPWXJ	SC-LX71/ LFXJ	Remarks
		PCB ASSEMBLIES						
NSP		1..PRIM_DISPLAY ASSY	AWM8120	AWM8122	AWM8123	AWM8131	AWM8132	
	P91-6	2..PRIMARY ASSY	AWX9166	AWX9168	AWX9169	AWX9168	AWX9169	
NSP		1..DIGITAL MOTHER ASSY	AWP7058	AWP7060	AWP7061	AWP7066	AWP7067	
	P89-2	2..D-MOTHER ASSY	AWX9196	AWX9198	AWX9199	AWX9204	AWX9205	
NSP		1..AUDIO ASSY	AWR7071	AWR7073	AWR7073	AWR7073	AWR7073	
	P91-12	2..AUDIO ASSY	AWX9206	AWX9208	AWX9208	AWX9208	AWX9208	
	P89-11	1..HDMI NETWORK ASSY	AWX9234	AWX9135	AWX9135	AWX9190	AWX9190	
	P91-14	1..FM/AM Tuner Unit	AXX7248	AXX7251	AXX7251	AXX7251	AXX7251	
		PACKING						
	P85-4	Operating Instructions (English)	ARB7393	ARB7394	Not used	ARB7394	Not used	
	P85-4	Operating Instructions (Chinese)	Not used	Not used	ARC7805	Not used	ARC7805	
	P85-5	Operating Instructions (French)	ARC7799	Not used	Not used	Not used	Not used	
	P85-5	Operating Instructions (Spanish)	Not used	ARC7806	Not used	ARC7806	Not used	
	P85-6	Operating Instructions (German)	ARC7800	Not used	Not used	Not used	Not used	
	P85-7	Operating Instructions (Italian)	ARC7801	Not used	Not used	Not used	Not used	
	P85-8	Operating Instructions (Spanish)	ARC7802	Not used	Not used	Not used	Not used	
	P85-9	Operating Instructions (Dutch)	ARC7803	Not used	Not used	Not used	Not used	
	P85-10	Operating Instructions (Russian)	ARC7804	Not used	Not used	Not used	Not used	
NSP	P85-12	Warranty Card EU	ARY7128	Not used	Not used	Not used	Not used	
⚠	P85-13	Power Cord	ADG7062	ADG7062	ADG7076	ADG7062	ADG7076	
	P85-20	Packing Case	AHD8603	AHD8607	AHD8605	AHD8608	AHD8606	
	P85-23	Label (WEEE)	ARW7322	Not used	Not used	Not used	Not used	
		Power Plug Adapter	Not used	AKX7022	Not used	AKX7022	Not used	
		Caution 220-230V	Not used	ARR7023	Not used	ARR7023	Not used	
		Caution Card SD SB	Not used	ARM7063	Not used	ARM7063	Not used	

Mark	No.	Symbol and Description	SC-LX81/ HYSXJ5	SC-LX81/ HDLPWXJ	SC-LX81/ LFXJ	SC-LX71/ HDLPWXJ	SC-LX71/ LFXJ	Remarks
		CHASSIS SECTION						
⚠	P89-12	Power Transformer (T1501)	ATS7423	ATS7423	ATS7425	ATS7423	ATS7425	
		REAR PANEL SECTION						
⚠	P91-15	Fuse (T5.0AL) FU1	REK1029	REK1029	Not used	REK1029	Not used	
⚠	P91-15	Fuse (T10AL) FU1	Not used	Not used	DEK1045	Not used	DEK1045	
	P91-33	Rear Panel	ANC8526	ANC8529	ANC8528	ANC8536	ANC8535	
NSP	P91-65	Fuse Card(T5AL250V)	AAX7098	AAX7098	Not used	AAX7098	Not used	
NSP	P91-65	Fuse Card(T10AL250V)	Not used	Not used	AAX7970	Not used	AAX7970	
NSP		CPA Label	Not used	AAX8152	Not used	AAX8153	Not used	
		FRONT PANEL SECTION						
	P93-22	Front Panel	ANB7483	ANB7484	ANB7484	ANB7488	ANB7488	

Notes : For PCB assemblies, Refer to “1.2 CONTRAST OF PCB ASSEMBLIES” and “2. SCHEMATIC DIAGRAM”.

■ Exploded Views

▪ REAR PANEL SECTION


Screw
CBZ30P080FTB
AC INLET ASSY
Rear Panel
Screw
BBZ30P080FTB
PRIMARY ASSY
(Voltage Selector
: S8751)
(HDLPWXJ Only)

1.2 CONTRAST OF PCB ASSEMBLIES

A F AUDIO ASSY

AWX9206 and AWX9208 are constructed the same except for the following:

Mark	Symbol and Description	AWX9206	AWX9208	Remarks
	IC5651 RDS Decoder IC	LC72725KM	Not used	
	D5651	1SS352	Not used	
	X5651 Crystal Resonator (4.332 MHz)	ASS7004	Not used	
	L5651	QTL1013	Not used	
	R5003, R5004	RS1/16S561J	RS1/16S331J	
	R5652, R5653	RS1/16S220J	Not used	
	R5657	RS1/16S473J	Not used	
	C5001, C5002	CCSRCH221J50	Not used	
	C5005, C5006	CCSRCH331J50	Not used	
	C5009, C5010, C5653	CCSRCH561J50	Not used	
	C5031-C5034, C5041, C5042, C5051	CCSRCH101J50	Not used	
	C5043, C5044, C5113, C5114	CCSRCH220J50	Not used	
	C5133, C5134	CCSRCH220J50	Not used	
	C5052-C5054, C5071-C5074	CCSRCH101J50	Not used	
	C5081-C5084, C5091-C5094	CCSRCH101J50	Not used	
	C5101-C5104, C5111, C5112	CCSRCH101J50	Not used	
	C5121-C5124, C5131, C5132	CCSRCH101J50	Not used	
	C5141-C5144, C5151-C5154	CCSRCH101J50	Not used	
	C5161-C5164, C5171-C5174	CCSRCH101J50	Not used	
	C5181-C5184	CCSRCH101J50	Not used	
	C5651	CEAT101M10	Not used	
	C5652	CCSRCH102J50	Not used	
	C5654	CKSRYB103K50	Not used	
	C5655, C5657	CCSRCH270J50	Not used	
	C5656	CEAT100M50	Not used	
	C5658	CKSRYB472K50	Not used	

B F D-MOTHER ASSY (SC-LX81)

AWX9196, AWX9198 and AWX9199 are constructed the same except for the following:

Mark	Symbol and Description	AWX9196	AWX9198	AWX9199	Remarks
	R2010	RS1/16S473J	RS1/16S473J	RS1/16S104J	
	R2012	RS1/16S473J	RS1/16S473J	RS1/16S333J	
	R2013	Not used	RS1/16S473J	Not used	*1
	R2058, R2059	RS1/16SS152J	Not used	Not used	
	R2060	RS1/16SS101J	Not used	Not used	
	R2134, R2135	RS1/16SS104J	Not used	Not used	

*1 : Refer to AWX9196 on page 96 of RRV3841.

B F D-MOTHER ASSY (SC-LX71)

AWX9202, AWX9204 and AWX9205 are constructed the same except for the following:

Mark	Symbol and Description	AWX9202	AWX9204	AWX9205	Remarks
	R2010	RS1/16S473J	Not used	RS1/16S473J	
	R2011	Not used	Not used	RS1/16S473J	*1
	R2012	Not used	RS1/16S473J	Not used	*1
	R2058, R2059	RS1/16SS152J	Not used	Not used	
	R2060	RS1/16SS101J	Not used	Not used	
	R2134, R2135	RS1/16SS104J	Not used	Not used	

*1 : Refer to AWX9202 on page 96 of RRV3841.

E F HDMI NETWORK ASSY (SC-LX81)

AWX9234 and AWX9135 are constructed the same except for the following:

Mark	Symbol and Description	AWX9234	AWX9135	Remarks
	R14	RS1/16SS332J	Not used	
	R599, R1795	RS1/16SS103J	Not used	
	R1895	RS1/16SS182J	RS1/16SS0R0J	
	C157	VCH1234	Not used	
	C159, C160, C1400	ACH7306	Not used	
	C401, C402, C503, C1301	VCH1234	CEVW101M16	
	C932	VCH1268	Not used	
	C1349, C1917	CCSSCH471J16	CKSSYB471K50	
	C1705, C1906	VCH1234	CEVW221M4	

E F HDMI NETWORK ASSY (SC-LX71)

AWX9235 and AWX9190 are constructed the same except for the following:

Mark	Symbol and Description	AWX9235	AWX9190	Remarks
	R14	RS1/16SS332J	Not used	
	R599, R1795	RS1/16SS103J	Not used	
	R1895	RS1/16SS182J	RS1/16SS0R0J	
	C157	VCH1234	Not used	
	C159, C160, C1400	ACH7306	Not used	
	C401, C402, C503, C1301	VCH1234	CEVW101M16	
	C932	VCH1268	Not used	
	C1349, C1917	CCSSCH471J16	CKSSYB471K50	
	C1705, C1906	VCH1234	CEVW221M4	

T F PRIMARY ASSY

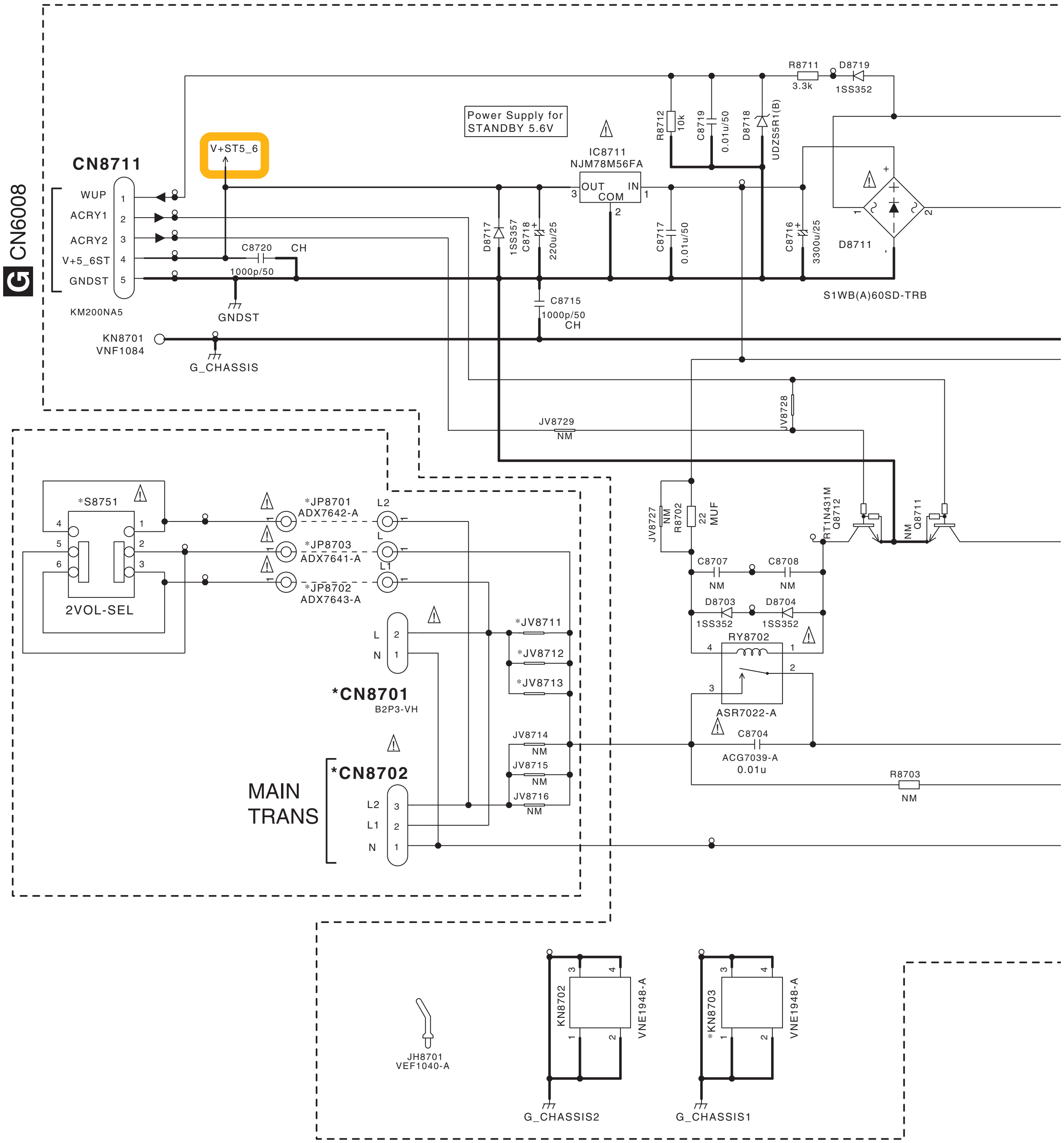
AWX9166, AWX9168 and AWX9169 are constructed the same except for the following:

Mark	Symbol and Description	AWX9166	AWX9168	AWX9169	Remarks
⚠	T8701	ATT7040	ATT7040	ATT7100	
	KN8703 Screw Plate	VNE1948	Not used	VNE1948	
⚠	S8751 Voltage Selector	Not used	AKX7020	Not used	
⚠	JP8701 Board In Wire	Not used	ADX7642	Not used	
⚠	JP8702 Board In Wire	Not used	ADX7643	Not used	
⚠	JP8703 Board In Wire	Not used	ADX7641	Not used	

2. SCHEMATIC DIAGRAM

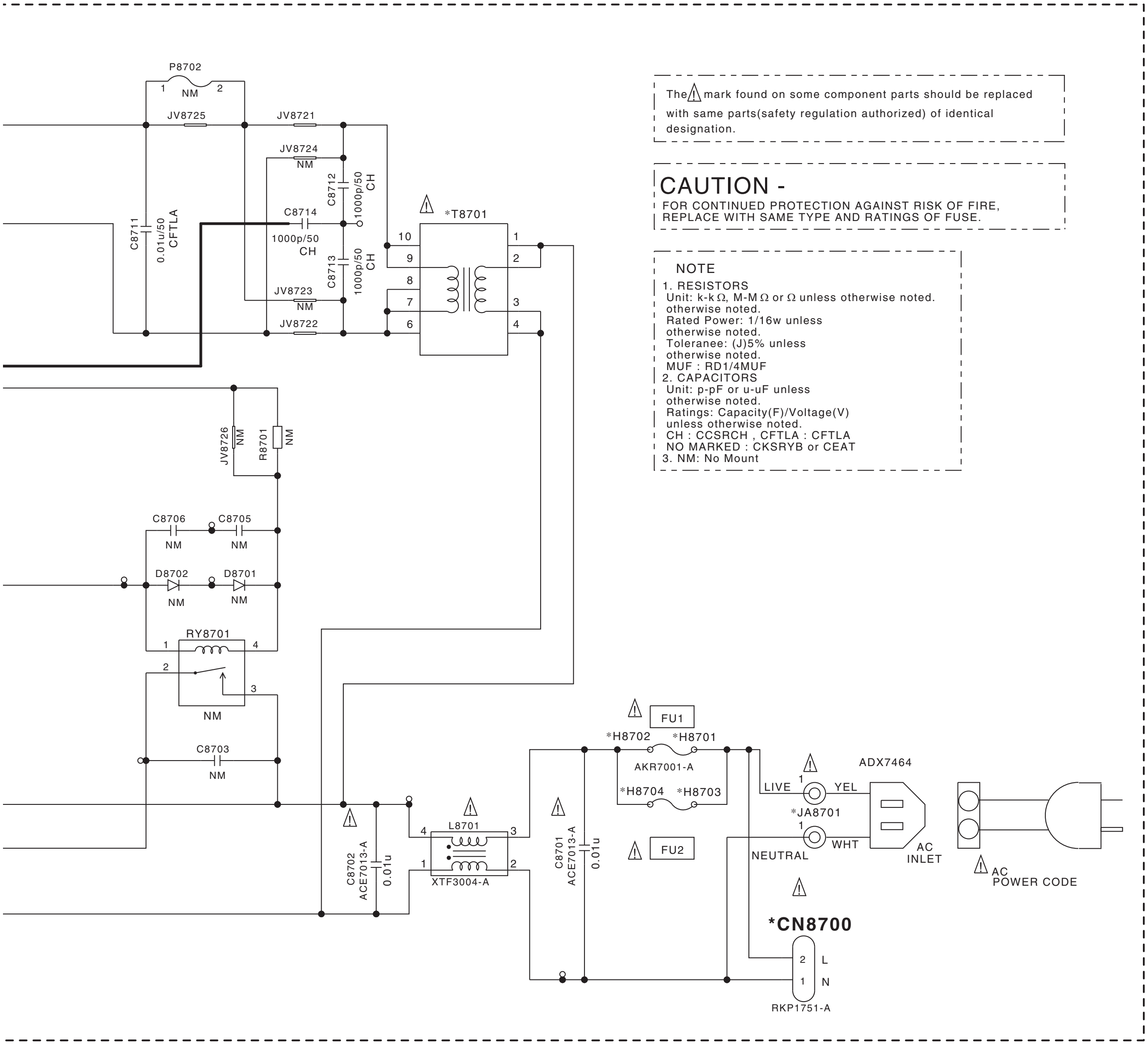
2.1 PRIMARY ASSY

	AWX9168	AWX9169
CN8701	NM	NM
CN8702	B3P5-VH	B3P5-VH
JP8701	ADX7642-A	NM
JP8702	ADX7643-A	NM
JP8703	ADX7641-A	NM
JP8701_1	ADX7642-A_1	NM
JP8702_1	ADX7643-A_1	NM
JP8703_1	ADX7641-A_1	NM
JV8711	NM	
JV8712	NM	
JV8713	NM	
S8751	AKX7020-A	NM


G CN6008
CN8711
WUP
ACRY1
ACRY2
V+5_6ST
GNDST
1
2
3
4
5
KM200NA5
V+ST5_6
C8720
1000p/50
CH
GNDST
KN8701
VNF1084
G_CHASSIS
Power Supply for
STANDBY 5.6V
IC8711
NJM78M56FA
OUT
IN
COM
3
1
2
D8717
1SS357
C8718
220u/25
C8715
1000p/50
CH
C8717
0.01u/50
R8712
10k
C8719
0.01u/50
D8718
UDZS5R1(B)
R8711
3.3k
D8719
1SS352
C8716
3300u/25
D8711
S1WB(A)60SD-TRB
JV8729
NM
JV8728
*S8751
2VOL-SEL
4
5
6
1
2
3
*JP8701
ADX7642-A
*JP8703
ADX7641-A
*JP8702
ADX7643-A
L2
L
L1
L
N
*CN8701
B2P3-VH
*JV8711
*JV8712
*JV8713
JV8714
NM
JV8715
NM
JV8716
NM
MAIN
TRANS
*CN8702
L2
L1
N
JV8727
NM
R8702
22
MUF
RT1N431M
Q8712
NM
Q8711
C8707
NM
C8708
NM
D8703
1SS352
D8704
1SS352
RY8702
ASR7022-A
C8704
ACG7039-A
0.01u
R8703
NM
JH8701
VEF1040-A
KN8702
VNE1948-A
*KN8703
VNE1948-A
G_CHASSIS2
G_CHASSIS1

T F PRIMARY ASSY (HDLPWXJ : AWX9168) (LFXJ : AWX9169)

	AWX9168	AWX9169
CN8700	NM	NM
H8701	AKR7001-A	AKR7001-A
H8702	AKR7001-A	AKR7001-A
H8703	NM	NM
H8704	NM	NM
JA8701	ADX7464-A	ADX7464-A
JA8701_1	ADX7464-A_1	ADX7464-A_1
KN8703	NM	VNE1948-A
T8701	ATT7040-A	ATT7100-A



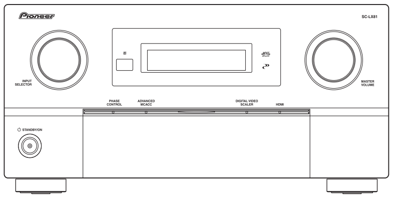
P8702
1
NM
2
JV8725
JV8721
JV8724
NM
C8712
1000p/50
CH
C8711
0.01u/50
CFTLA
C8714
1000p/50
CH
C8713
1000p/50
CH
JV8723
NM
JV8722
*T8701
10
9
8
7
6
1
2
3
4
JV8726
NM
R8701
NM
C8706
NM
C8705
NM
D8702
NM
D8701
NM
RY8701
1
4
2
3
NM
C8703
NM
C8702
ACE7013-A
0.01u
L8701
4
3
1
2
XTF3004-A
C8701
ACE7013-A
0.01u
FU1
*H8702
*H8701
AKR7001-A
*H8704
*H8703
FU2
LIVE
1
YEL
*JA8701
1
WHT
NEUTRAL
ADX7464
AC
INLET
AC
POWER CODE
*CN8700
2
L
1
N
RKP1751-A

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

CAUTION -
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
otherwise noted.
Rated Power: 1/16w unless
otherwise noted.
Toleranee: (J)5% unless
otherwise noted.
MUF : RD1/4MUF
2. CAPACITORS
Unit: p-pF or u-uF unless
otherwise noted.
Ratings: Capacity(F)/Voltage(V)
unless otherwise noted.
CH : CCSRCH , CFTLA : CFTLA
NO MARKED : CKSRYB or CEAT
3. NM: No Mount

Service Manual



SC-LX81

ORDER NO.
RRV3841

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

SC-LX81

SC-LX71

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
SC-LX81	HYSXJ5	AC 220 V to 230 V	
SC-LX71	HYSXJ5	AC 220 V to 230 V	

For details, refer to "Important Check Points for good servicing".

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

©PIONEER CORPORATION 2008

T-ZZV AUG. 2008 Printed in Japan

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

CONTENTS

1. SERVICE PRECAUTIONS 5
    1.1 NOTES ON SOLDERING 5
    1.2 NOTES ON REPLACING PARTS 5
    1.3 NOTES ON ASSEMBLING 6
2. SPECIFICATIONS 8
    2.1 ACCESSORIES 8
    2.2 SPECIFICATIONS 9
    2.3 PANEL FACILITIES 10
3. BASIC ITEMS FOR SERVICE 16
    3.1 CHECK POINTS AFTER SERVICING 16
    3.2 PCB LOCATIONS 17
    3.3 JIGS LIST 19
4. BLOCK DIAGRAM 20
    4.1 OVERALL WIRING DIAGRAM 20
    4.2 AUDIO BLOCK DIAGRAM 22
    4.3 DSP BLOCK DIAGRAM 24
    4.4 HDMI NETWORK BLOCK DIAGRAM 25
    4.5 MICROCOMPUTER BLOCK DIAGRAM 26
    4.6 POWER BLOCK DIAGRAM 28
5. DIAGNOSIS 30
    5.1 DIAGNOSIS FLOWCHART 30
    5.2 CIRCUIT DESCRIPTION 62
6. SERVICE MODE 70
    6.1 TEST MODE 70
7. DISASSEMBLY 75
8. EACH SETTING AND ADJUSTMENT 78
    8.1 HOW TO UPDATE FIRMWARE 78
9. EXPLODED VIEWS AND PARTS LIST 84
    9.1 PACKING SECTION 84
    9.2 EXTERIOR SECTION 86
    9.3 CHASSIS SECTION 88
    9.4 REAR PANEL SECTION 90
    9.5 FRONT PANEL SECTION 92
10. SCHEMATIC DIAGRAM 94
    10.1 AUDIO ASSY 94
    10.2 D-MOTHER ASSY (1/4) 96
    10.3 D-MOTHER ASSY (2/4) 98
    10.4 D-MOTHER ASSY (3/4) 100
    10.5 D-MOTHER ASSY (4/4) 102
    10.6 FRONT IN and V-BRIDGE ASSYS 104
    10.7 232C & CONTROL ASSY 106
    10.8 HDMI NETWORK ASSY (1/6) 108
    10.9 HDMI NETWORK ASSY (2/6) 110
    10.10 HDMI NETWORK ASSY (3/6) 112
    10.11 HDMI NETWORK ASSY (4/6) 114
    10.12 HDMI NETWORK ASSY (5/6) 116
    10.13 HDMI NETWORK ASSY (6/6) 118
    10.14 INTERFACE ASSY 120
    10.15 COMPONENT ASSY 122
    10.16 COMPOSITE S ASSY 124
    10.17 FRONT BRIDGE ASSY 126
    10.18 DISPLAY, VOL and POWER SW ASSYS 128
    10.19 PRE BRIDGE, ICE BUFFER, ICE SHIELD and PRIMARY GUARD ASSYS 130
    10.20 ICE INTERFACE and ZOUT ASSYS 132
    10.21 ICEPOWER AMP (1/5) 134
    10.22 ICEPOWER AMP (2/5) 136
    10.23 ICEPOWER AMP (3/5) 138
    10.24 ICEPOWER AMP (4/5) 140
    10.25 ICEPOWER AMP (5/5) 142
    10.26 PRIMARY ASSY 144
    10.27 REG ASSY 146
    10.28 ICE REG ASSY 148
    10.29 B REG ASSY 150
    10.30 B DIODE, DCDC, and HDMI RECT ASSYS 152
11. PCB CONNECTION DIAGRAM 153

11.1 AUDIO ASSY 154
11.2 D-MOTHER ASSY 158
11.3 FRONT IN ASSY 162
11.4 232C & CONTROL ASSY 163
11.5 HDMI NETWORK ASSY 164
11.6 INTERFACE ASSY 168
11.7 COMPONENT and V BRIDGE ASSYS 172
11.8 COMPOSITE S ASSY 176
11.9 FRONT BRIDGE ASSY 178
11.10 DISPLAY, POWER SW and VOL ASSYS 180
11.11 PRE BRIDGE, ICE BUFFER and ICE SHIELD ASSYS 184
11.12 ICE INTERFACE ASSY 186
11.13 ICEPOWER AMP ASSY 188
11.14 ZOUT, PRIMARY GUARD and REG ASSYS 192
11.15 PRIMARY ASSY 196
11.16 ICE REG ASSY 198
11.17 B DIODE and B REG ASSYS 200
11.18 DCDC and HDMI RECT ASSYS 202
12. ELECTRICAL PARTS LIST 203

1. SERVICE PRECAUTIONS

1.1 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit. Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.

- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 ºC. Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 ºC in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Do NOT use a soldering iron whose tip temperature cannot be controlled.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:
- Parts numbers of lead-free solder:
  GYP1006 1.0 in dia.
  GYP1007 0.6 in dia.
  GYP1008 0.3 in dia.

1.2 NOTES ON REPLACING PARTS

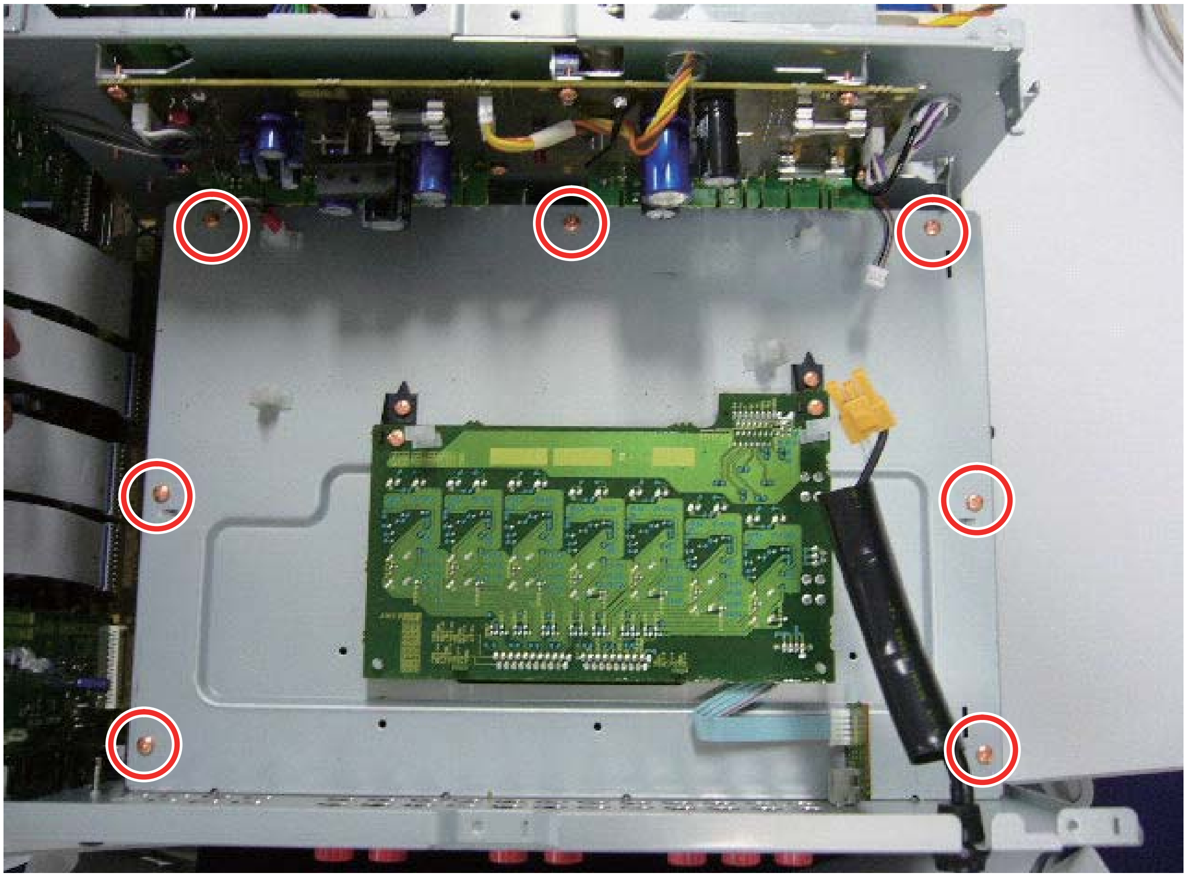
The part listed below is difficult to replace as a discrete component part.
When the part listed in the table is defective, replace whole Assy.

ASSY NAME	PCB ASSY Part No.	Parts that is Difficult to Replace			
		Ref No.	FUNCTION	Part No.	Remarks
HDMI NETWORK ASSY	SC-LX81: AWX9234 SC-LX71: AWX9235	IC101	HDMI Receiver	SII9135CTU	IC with heat-pad
		IC701	MEDIA Processor	DM850E	IC with heat-pad
		IC791	iPod Co-Processor	341S2154	IC with heat-pad

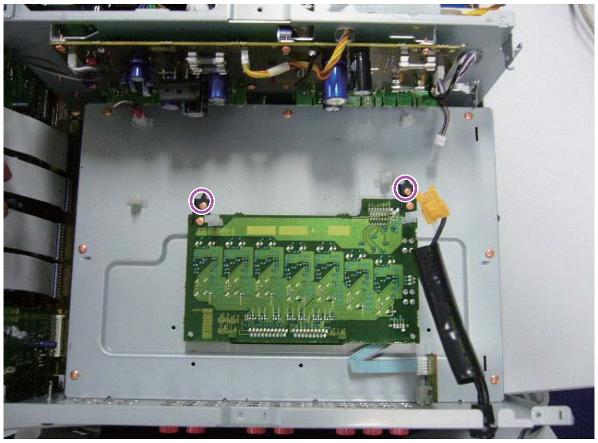
1.3 NOTES ON ASSEMBLING

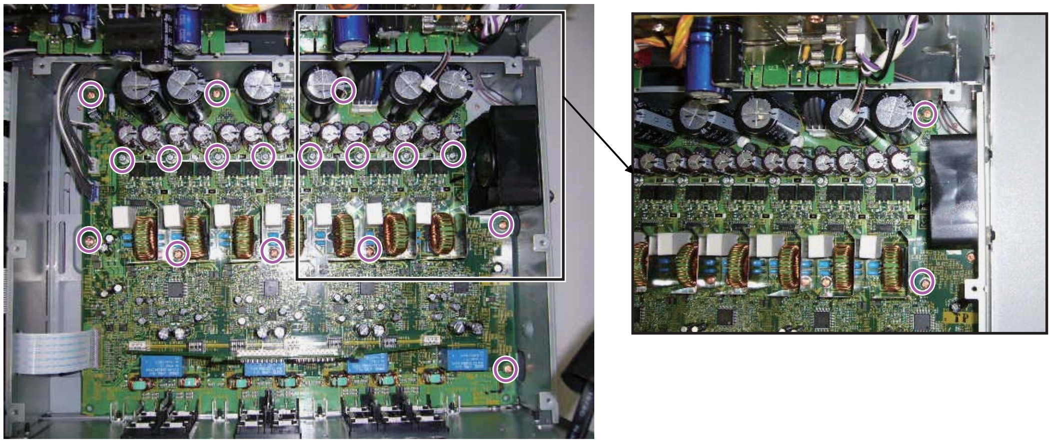
When assembling the ICE amplifier block, please note the following points of screws to prevent from short circuit.

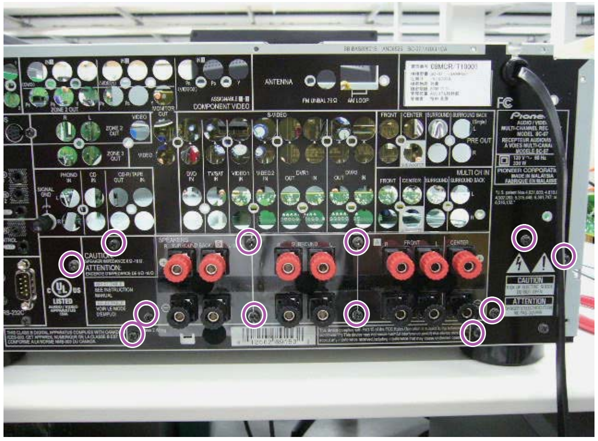
The following 7 points of screws must always be used AMZ30P060FTC



Points to be watched for swarf



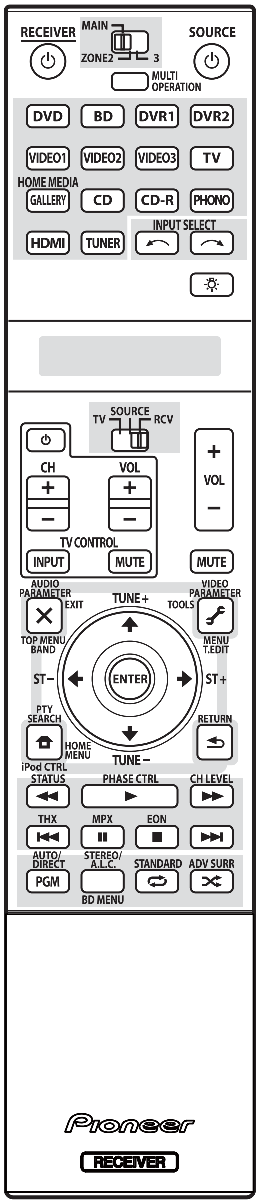




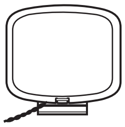
If a screw at any of these points needs to be removed for service,
be sure to check that the swarf is not on the screw before refastening.

2. SPECIFICATIONS

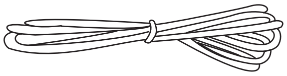
2.1 ACCESSORIES


RECEIVER
MAIN
ZONE2
3
SOURCE
MULTI OPERATION
DVD
BD
DVR1
DVR2
VIDEO1
VIDEO2
VIDEO3
TV
HOME MEDIA GALLERY
CD
CD-R
PHONO
HDMI
TUNER
INPUT SELECT
SOURCE
TV
RCV
CH
VOL
TV CONTROL
INPUT
MUTE
MUTE
AUDIO PARAMETER
EXIT
TUNE +
TOOLS
VIDEO PARAMETER
TOP MENU BAND
MENU T.EDIT
ST –
ENTER
ST +
PTY SEARCH
HOME MENU
TUNE –
RETURN
iPod CTRL
STATUS
PHASE CTRL
CH LEVEL
THX
MPX
EON
AUTO/ DIRECT
STEREO/ A.L.C.
STANDARD
ADV SURR
PGM
BD MENU
Pioneer
RECEIVER

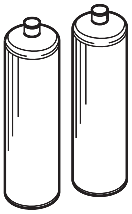
Remote Control Unit
(AXD7521)



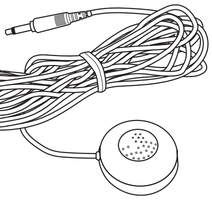
AM Loop Antenna
(ATB7013)



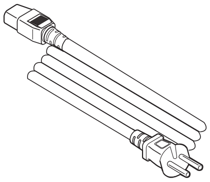
FM Wire Antenna
(ADH7030)



AA/IEC R6P
Dry Cell Batteries



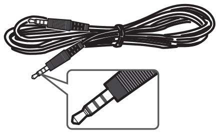
Setup Microphone
(for Auto MCACC setup)
(APM7008)



Power Cord
(ADG7062)

- Caution Sheet SP
- Warranty Card
- Operating Instructions

SERVICE PARTS



SR+ mini-plug cable
(ADE7095)

2.2 SPECIFICATIONS

Specifications

Amplifier Section

Multi channel simultaneous power output (1 kHz, 1 %, 8 Ω)
7ch total . . . . .700 W (LX81), 630 W(LX71)
Continuous Power Output (Multichannel)
(DIN 1 kHz, THD 1 %, 6 Ω)
Front. . . . . . . 190 W + 190 W (LX81), 180 W + 180 W (LX71)
Center . . . . 190 W (LX81), 180 W (LX71)
Surround . . . . 190 W + 190 W (LX81)
180 W + 180 W (LX71)
Surround back . . . . 190 W + 190 W (LX81)
180 W + 180 W (LX71)
(DIN 1 kHz, THD 1 %, 8 Ω)
Front. . . . . . . 160 W + 160 W (LX81), 150 W + 150 W (LX71)
Center . . . . 160 W (LX81), 150 W (LX71)
Surround . . . . 160 W + 160 W (LX81)
150 W + 150 W (LX71)
Surround back . . . . 160 W + 160 W (LX81)
150 W + 150 W (LX71)

Total harmonic distortion. . . . . 0.05 %
(20 Hz to 20 kHz, 130 W, 8 Ω)
Rated Power Output – Stereo (20 Hz to 20 kHz, 0.09 %, 8 Ω)
. . . . 140 W+140 W

- The above specifications are applicable when the power supply is 230 V.

Audio Section

Input (Sensitivity/Impedance)
PHONO MM . . . . 4.2 mV/47 kΩ
LINE . . . . .335 mV/47 kΩ
Frequency Response (LINE). . . . . . .5 Hz to 100 000 Hz dB
Output (Level/Impedance)
REC . . . . 335 mV/2.2 kΩ
Signal-to-Noise Ratio (IHF, short circuited, A network)
LINE . . . . .103 dB
Signal-to-Noise Ratio
[DIN (continuous rated power output/50 mW)]
LINE. . . . . 92 dB/65 dB

Composite Video / S-Video Section

Input (Sensitivity/Impedance) . . . . .1 Vp-p/75 Ω
Output (Level/Impedance) . . . . .1 Vp-p/75 Ω
Signal-to-Noise Ratio . . . . .65 dB
Frequency Response .5 Hz to 10 MHz

Component Video Section

Input (Sensitivity/Impedance) . . . . .1 Vp-p/75 Ω
Output (Level/Impedance) . . . . .1 Vp-p/75 Ω
Signal-to-Noise Ratio . . . . .65 dB
Frequency Response . . . . .5 Hz to 100 MHz

- Specifications and the design are subject to possible modifications without notice, due to improvements.

Manufactured under license from Dolby Laboratories. “Dolby”, “Pro Logic”, “Surround EX” and the double-D symbol are trademarks of Dolby Laboratories.

HDMI Section

Input 19-pin
Output. . . . . 19-pin (5 V, 100 mA)

Network Section

LAN terminal . . . . 10 BASE-T/100 BASE-TX

USB Section

USB terminal . . . . USB2.0 Full Speed

FM Tuner Section

Frequency Range . . . . 87.5 MHz to 108 MHz
Antenna Input . . . . 75 Ω unbalanced

AM Tuner Section

Frequency Range . . . . 531 kHz to 1602 kHz (9 kHz step)
Antenna . . . . Loop antenna

Miscellaneous

Power Requirements. . . . . . . AC 220 V to 230 V, 50 Hz/60 Hz
Power Consumption . . . . .330 W
In standby . . . . .0.5 W (HDMI Control OFF)
0.7 W (HDMI Control ON)
Dimensions . . . . 420 (W) mm x 200 (H) mm x 459.5 (D) mm
Weight (without package). . . . . 18.5 kg

Furnished Parts

Setup microphone (for Auto MCACC Setup) 1
AA/IEC R6P dry cell batteries 2
Remote control unit. 1
AM loop antenna 1
FM wire antenna 1
Power cord 1
Warranty card 1
Operating instructions

Note

- Specifications and the design are subject to possible modifications without notice, due to improvements.

Manufactured under license under U.S. Patent #’s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,226,616; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS is a registered trademark and the DTS logos, Symbol, DTS-HD and DTS-HD Master Audio are trademarks of DTS, Inc. © 1996-2007 DTS, Inc. All Rights Reserved.

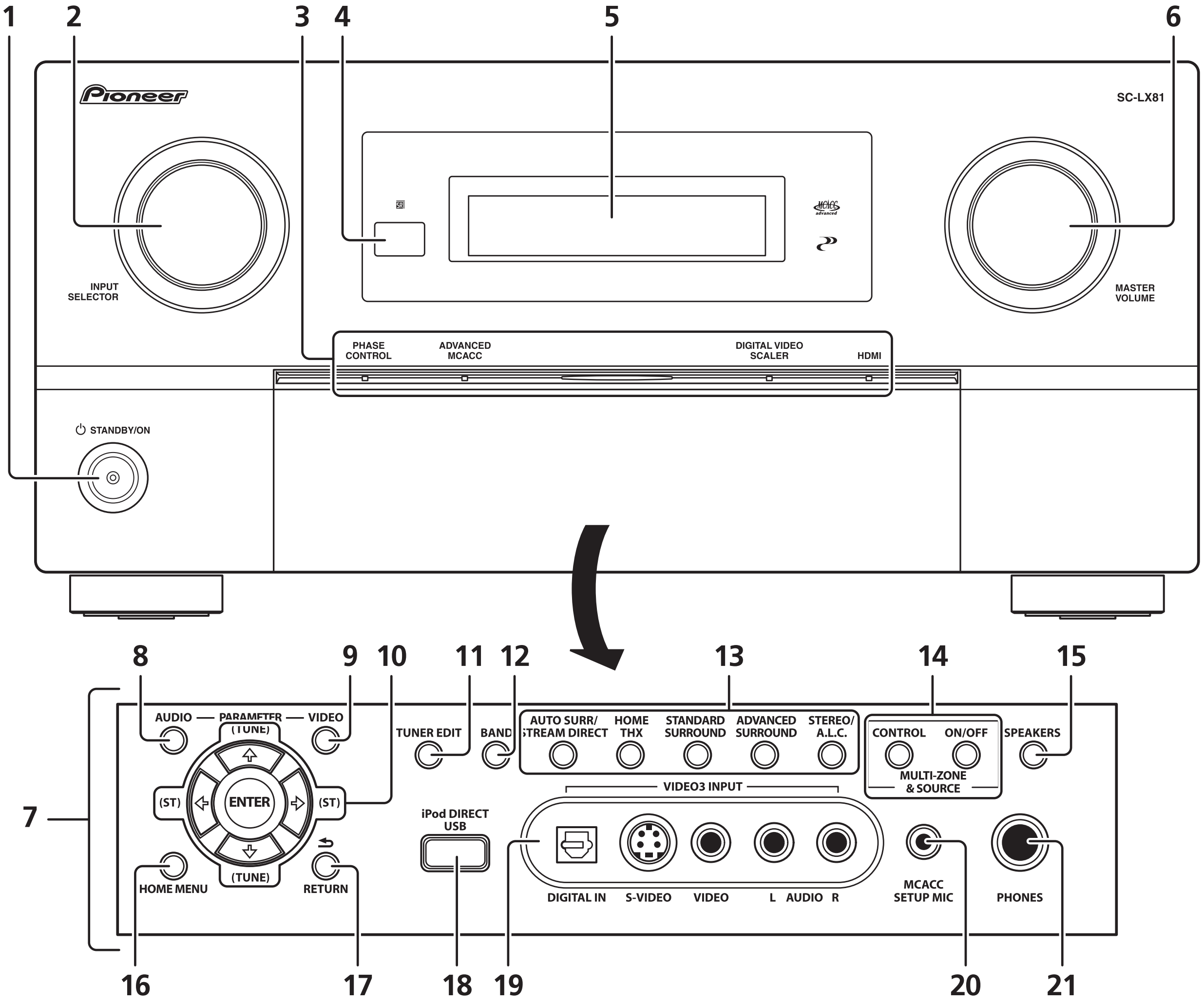
Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

THX, the THX logo, Ultra2 Plus and Select2 Plus are trademarks of THX Ltd. which may be registered in some jurisdictions. All rights reserved. All other trademarks are the property of their respective owners.

“Neural Surround”, “Neural Audio”, “Neural” and “NRL” are trademarks and logos owned by Neural Audio Corporation, THX is a trademark of THX Ltd., which may be registered in some jurisdictions. All rights reserved.

2.3 PANEL FACILITIES

[1] Front Panel


1
2
3
4
5
6
Pioneer
SC-LX81
INPUT SELECTOR
MASTER VOLUME
PHASE CONTROL
ADVANCED MCACC
DIGITAL VIDEO SCALER
HDMI
STANDBY/ON
7
8
9
10
11
12
13
14
15
AUDIO
PARAMETER
VIDEO
(TUNE)
(ST)
ENTER
(ST)
(TUNE)
HOME MENU
RETURN
TUNER EDIT
BAND
AUTO SURR/ STREAM DIRECT
HOME THX
STANDARD SURROUND
ADVANCED SURROUND
STEREO/ A.L.C.
CONTROL
ON/OFF
MULTI-ZONE & SOURCE
SPEAKERS
VIDEO3 INPUT
iPod DIRECT USB
DIGITAL IN
S-VIDEO
VIDEO
L AUDIO R
MCACC SETUP MIC
PHONES
16
17
18
19
20
21

1 ⏻ STANDBY/ON
Switches the receiver between on and standby. Power indicator lights when the receiver is on.

2 INPUT SELECTOR dial
Use to select an input source.

3 PHASE CONTROL indicator – Lights to indicate Phase Control or Full Band Phase Control is selected.
ADVANCED MCACC indicator – Lights when one of the Selecting MCACC presets is selected.
DIGITAL VIDEO SCALER indicator – Lights when Resolution is set to a setting other than **PURE** (for example, when the video input signal is upscaled).
HDMI indicator – Blinks when connecting an HDMI-equipped component; lights when the component is connected.

4 Remote sensor
Receives the signals from the remote control.

5 Character display

6 MASTER VOLUME dial

7 Front panel controls
To access the front panel controls, push gently on the lower third portion of the panel with your finger.

8 AUDIO PARAMETER
Use to access the Audio options.

9 VIDEO PARAMETER
Use to access the Video options.

10 ⬆/⬇/⬅/➡ (TUNE/ST) /ENTER
Use the arrow buttons when setting up your **HOME MENU**.
Use **TUNE ⬆/⬇** to find radio frequencies and use **ST ⬅/➡** to find preset stations.

11 TUNER EDIT
Use with **⬆/⬇/⬅/➡/ENTER** to memorize and name stations for recall.

12 BAND

Switches between AM and FM radio bands.

13 Listening mode buttons

AUTO SURR/STREAM DIRECT – Press to select Auto Surround or Stream Direct listening.

HOME THX – Press to select a Home THX listening mode.

STANDARD SURROUND – Press for Standard decoding and to switch between the various DD Pro Logic IIx and Neo:6 options.

ADVANCED SURROUND – Use to switch between the various surround modes.

STEREO/A.L.C. – Switches between stereo playback, Auto level control stereo mode and Front Stage Surround Advance modes.

14 MULTI-ZONE & SOURCE controls

If you've made MULTI-ZONE connections use these controls to control the sub zone from the main zone.

15 SPEAKERS

Use to change the speaker system.

16 HOME MENU

Press to access the **HOME MENU**.

17 RETURN

Press to confirm and exit the current menu screen.

18 iPod DIRECT USB terminal

Use to connect your Apple iPod as an audio source, or connect a USB audio device for playback.

19 VIDEO 3 INPUT

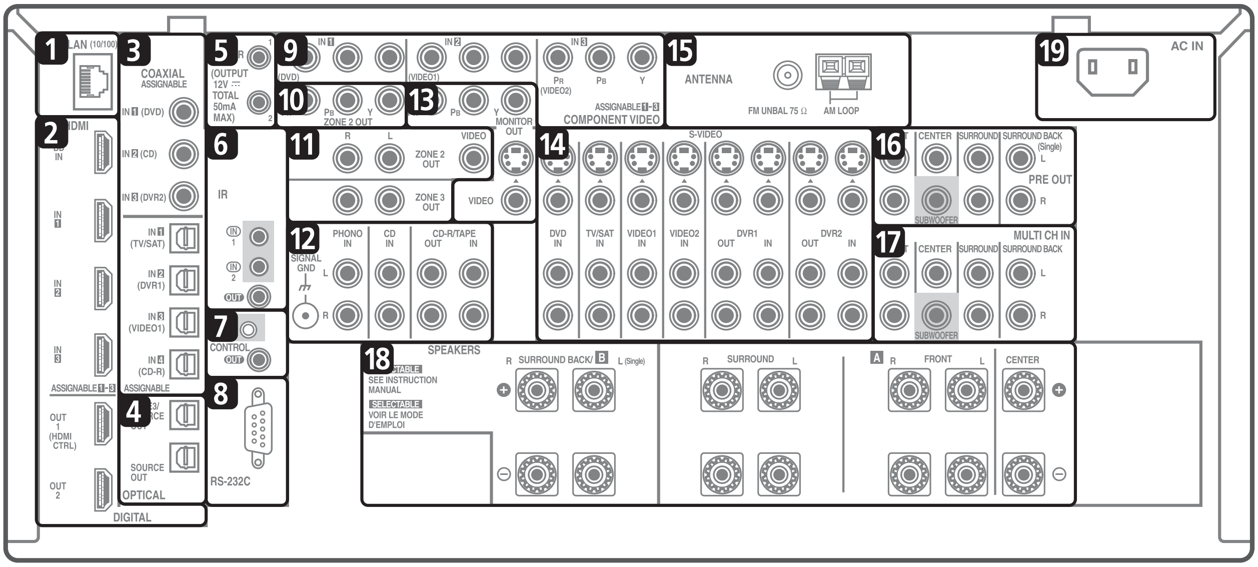
20 MCACC SETUP MIC jack

Use to connect the supplied microphone.

21 PHONES jack

Use to connect headphones. When the headphones are connected, there is no sound output from the speakers.

[2] Rear Panel


1
LAN (10/100)
2
HDMI
BD IN
IN 1
IN 2
IN 3
ASSIGNABLE 1 - 3
OUT 1 (HDMI CTRL)
OUT 2
3
COAXIAL ASSIGNABLE
IN 1 (DVD)
IN 2 (CD)
IN 3 (DVR2)
IN 1 (TV/SAT)
IN 2 (DVR1)
IN 3 (VIDEO1)
IN 4 (CD-R)
ASSIGNABLE
4
ZONE3/ SOURCE OUT
SOURCE OUT
OPTICAL
DIGITAL
5
(OUTPUT 12V TOTAL 50mA MAX)
6
IR
IN 1
IN 2
OUT
7
CONTROL
OUT
8
RS-232C
9
IN 1 (DVD)
IN 2 (VIDEO1)
IN 3 PR (VIDEO2) PB Y
ASSIGNABLE 1 - 3
COMPONENT VIDEO
10
PR PB Y
ZONE 2 OUT
13
PB Y
MONITOR OUT
11
R L
ZONE 2 OUT
VIDEO
ZONE 3 OUT
VIDEO
12
SIGNAL GND
PHONO IN
CD IN
CD-R/TAPE OUT IN
14
S-VIDEO
DVD IN
TV/SAT IN
VIDEO1 IN
VIDEO2 IN
DVR1 OUT IN
DVR2 OUT IN
15
ANTENNA
FM UNBAL 75 Ω
AM LOOP
16
CENTER
SURROUND
SURROUND BACK (Single)
PRE OUT
SUBWOOFER
17
MULTI CH IN
CENTER
SURROUND
SURROUND BACK
SUBWOOFER
18
SPEAKERS
SELECTABLE SEE INSTRUCTION MANUAL
SELECTABLE VOIR LE MODE D'EMPLOI
SURROUND BACK/ B
L (Single)
SURROUND
A
FRONT
CENTER
19
AC IN

Caution

- Before making or changing the connections, switch off the power and disconnect the power cord from the power outlet. Plugging in should be the final step.

1 LAN (10/100) terminal

2 HDMI connectors (x6 (SC-LX81), x5 (SC-LX71))
Multiple inputs and one (SC-LX71) or two (SC-LX81) outputs for high-quality audio/video connection to compatible HDMI devices.

3 Optical and coaxial digital audio inputs (x7 (SC-LX81), x6 (SC-LX71))
Use for digital audio sources, including DVD players/recorders, digital satellite receivers, CD players, etc.

4 Optical digital audio outputs (x2)
Use for recording to a CD or MiniDisc recorder. **ZONE3/SOURCE OUT** jack is also used for MULTI-ZONE connections.

5 12 V trigger jacks (total 50 mA max.) **(x2)**
Use to switch components in your system on and off according to the input function of the receiver.

6 Remote inputs/output
Use for connection to an external remote control sensor for use in a MULTI-ZONE setup, for example.

7 Control input/output
Use to connect other Pioneer components so that you can control all your equipment from a single IR remote sensor.

8 RS-232C connector
Use for connection to a PC for graphical output when using Advanced MCACC or Full Band Phase Control.

9 Component video inputs (x3)
Use the inputs to connect any video source that has component video output, such as a DVD player.

10 SC-LX81 only: **ZONE 2 component video output**
Use to connect monitors or TVs in a separate room.

11 MULTI-ZONE audio/video outputs
Use to connect a second or third amplifier and monitors or TVs in a separate room.

12 Stereo analog audio source inputs/(outputs) (x4)
Use for connection to audio sources such as CD players, tape decks, turntables, etc.

13 Composite, S-Video and Component monitor outputs
Use to connect monitors and TVs.

14 Audio/video source inputs/(outputs) (x8)
Use for connection to audio/visual sources, such as DVD players/recorders, VCRs, etc. Each set of inputs has jacks for composite video, S-Video and stereo analog audio.

15 AM and FM antenna terminals
Use to connect indoor or outdoor antennas for radio broadcasts.

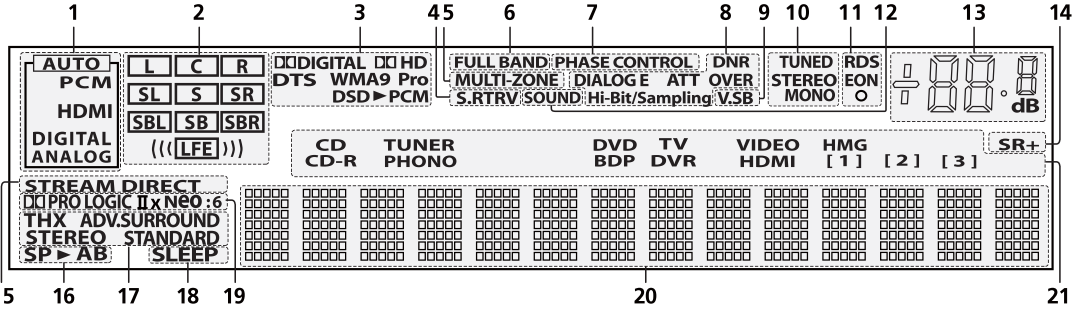
16 Multichannel pre-amplifier outputs
Use to connect separate amplifiers for front, center, surround, surround back and subwoofer channels.

17 Multichannel analog audio inputs
7.1 channel inputs for connection to a DVD player with multichannel analog outputs.

18 Speaker terminals
Use for connection to the main front, center, surround and surround back speakers.

19 AC power inlet
Connect the supplied power cord here.

[3] Display


1
2
3
4
5
6
7
8
9
10
11
12
13
14
AUTO
PCM
HDMI
DIGITAL
ANALOG
L C R
SL S SR
SBL SB SBR
(((LFE)))
⊐⊏DIGITAL ⊐⊏HD
DTS WMA9 Pro
DSD►PCM
FULL BAND
PHASE CONTROL
DNR
MULTI-ZONE
DIALOG E
ATT
OVER
S.RTRV
SOUND
Hi-Bit/Sampling
V.SB
TUNED
STEREO
MONO
RDS
EON
dB
CD
CD-R
TUNER
PHONO
DVD
BDP
TV
DVR
VIDEO
HDMI
HMG
[1] [2] [3]
SR+
STREAM DIRECT
⊐⊏PRO LOGIC IIx Neo:6
THX ADV.SURROUND
STEREO STANDARD
SP ► AB
SLEEP
15
16
17
18
19
20
21

1 SIGNAL indicators

Light to indicate the currently selected input signal.

AUTO lights when the receiver is set to select the input signal automatically.

2 Program format indicators

These change according to which channels are active in digital sources.

L – Left front channel

C – Center channel

R – Right front channel

SL – Left surround channel

S – Surround channel (mono)

SR – Right surround channel

SBL – Left surround back channel

SB – Surround back channel (mono)

SBR – Right surround back channel

LFE – Low frequency effects channel (the **((( )))** indicators light when an LFE signal is being input)

3 Digital format indicators

Light when a signal encoded in the corresponding format is detected (**DSD ► PCM** lights during DSD (Digital Stream Direct) to PCM conversion with SACDs).

4 S.RTRV

Lights when the Sound Retriever is switched on.

5 MULTI-ZONE

Lights when the MULTI-ZONE feature is active.

6 FULL BAND

Lights when the Full Band Phase Control is switched on.

7 PHASE CONTROL

Lights when the Phase Control or Full Band Phase Control is switched on.

8 Sound processing indicators

Light according to the active Audio parameter(s) and/or **ANALOG ATT**.

9 V.SB

Lights during Virtual surround back processing.

10 TUNER indicators

TUNED – Lights when a broadcast is being received.

STEREO – Lights when a stereo FM broadcast is being received in auto stereo mode.

MONO – Lights when the mono mode is set using **MPX**.

11 EON/RDS indicators

EON – Lights when the EON mode is set (flashes during EON reception). The ○ indicator lights when the current station carries the EON service.

RDS – Lights when an RDS broadcast is received.

12 SOUND

Lights when any of the Midnight, Loudness or tone controls feature is selected.

13 Master volume level

Shows the overall volume level. **–80dB** indicates the minimum level, and **+12dB** indicates the maximum level.

14 SR+

Lights when the SR+ mode is switched on.

15 STREAM DIRECT

Lights when Direct/Pure Direct is selected.

16 Speaker indicators

Lights to indicate the current speaker system, **A** and/or **B**.

17 Listening mode indicators

THX – Lights when one of the Home THX modes is selected.

ADV.SURROUND – Lights when one of the Advanced Surround modes has been selected.

STEREO – Lights when stereo listening is switched on.

STANDARD – Lights when one of the Standard Surround modes is switched on.

18 SLEEP

Lights when the receiver is in sleep mode.

19 Matrix decoding format indicators

⊐⊏ PRO LOGIC IIx – This lights to indicate ⊐⊏ Pro Logic II / ⊐⊏ Pro Logic IIx decoding.

Neo:6 – When one of the Neo:6 modes of the receiver is on, this lights to indicate Neo:6 processing.

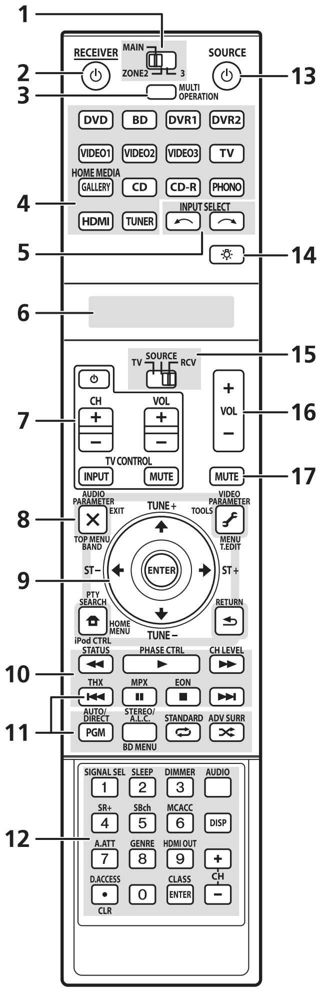
20 Character display

Displays various system information.

21 Input source indicators

Light to indicate the input source you have selected.

[4] Remote Control


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
RECEIVER
MAIN
ZONE2
3
SOURCE
MULTI OPERATION
DVD
BD
DVR1
DVR2
VIDEO1
VIDEO2
VIDEO3
TV
HOME MEDIA GALLERY
CD
CD-R
PHONO
HDMI
TUNER
INPUT SELECT
SOURCE
TV
RCV
CH
VOL
TV CONTROL
INPUT
MUTE
VOL
MUTE
AUDIO PARAMETER
EXIT
TUNE +
TOOLS
VIDEO PARAMETER
TOP MENU BAND
MENU T.EDIT
ST–
ENTER
ST+
PTY SEARCH
HOME MENU
TUNE –
RETURN
iPod CTRL
STATUS
PHASE CTRL
CH LEVEL
THX
MPX
EON
AUTO/ DIRECT
STEREO/ A.L.C.
STANDARD
ADV SURR
PGM
BD MENU
SIGNAL SEL
SLEEP
DIMMER
AUDIO
SR+
SBch
MCACC
DISP
A.ATT
GENRE
HDMI OUT
D.ACCESS
CLASS
CH
ENTER
CLR
1
2
3
4
5
6
7
8
9
0

The remote has been conveniently color-coded according to component control using the following system:

- **White** – Receiver control, TV Control
- **Blue** – Other controls

1 MULTI-ZONE operation selector switch
Switch to perform operations in the main zone, zone 2 and zone 3.

2 RECEIVER ⏻
This switches between standby and on for this receiver.

3 MULTI OPERATION
Use this button to perform multi operations.

4 Input source buttons
Press to select control of other components.

5 INPUT SELECT
Use to select the input source.

6 Character display (LCD)
This display shows information when transmitting control signals.
The following commands are shown when you're setting the remote to control other components:

SETUP – Indicates the setup mode, from which you choose the options below.
PRESET –
LEARNING –
MULTI OP –
SYS OFF –
DIRECT F –
RENAME –
ERASE –
RESET –
READ ID –

7 TV CONTROL buttons
These buttons are dedicated to control the TV assigned to **TV** operation selector switch. Thus if you only have one TV to hook up to this system assign it to the **TV** operation selector switch.

⏻ – Use to turn on/off the power of the TV.
VOL +/– – Use to adjust the volume on your TV.
INPUT – Use to select the TV input signal.
CH +/– – Use to select channels.
MUTE – Use to mute the sound or cancel the mute mode.

8 Tuner/component control buttons/HOME MENU
These button controls can be accessed after you have selected the corresponding input source button (**DVD**, **DVR 1**, **TV**, etc.).
Set the operation selector switch to **RCV** to access the following controls:

AUDIO PARAMETER – Use to access the Audio options.
VIDEO PARAMETER – Use to access the Video options.
HOME MENU – Use to access the **HOME MENU**
RETURN – Press to confirm and exit the current menu screen (also use to return to the previous menu with DVDs or to select closed captioning with DTV).

9 ⬆/⬇/⬅/➡ (TUNE +/–/ST +/–) /ENTER
Use the arrow buttons when setting up your surround sound system and the Audio or Video options. Also used to control DVD menus/ options and for deck 1 of a double cassette deck player. Use **TUNE +/–** (⬆/⬇) to find radio frequencies and use **ST +/–** (⬅/➡) to find preset stations.

10 Component control buttons
The main buttons (►, ■, etc.) are used to control a component after you have selected it using the input source buttons.
The controls above these buttons can be accessed after you have selected the corresponding input source button (for example **DVD**, **DVR 1** or **TV**). These buttons also function as described below.

Press **TUNER** first to access:

MPX – Switches between stereo and mono reception of FM broadcasts. If the signal is weak, then switching to mono will improve the sound quality. NOISE CUT MODE 1 to 2 can be selected when receiving AM broadcasts.

EON – Use to search for programs that are broadcasting traffic or news information.

Set the operation selector switch to **RCV** first to access:

STATUS – Press to check selected receiver settings.

PHASE CTRL – Press to switch on/off Phase Control or Full Band Phase Control.

CH LEVEL – Press repeatedly to select a channel, then use ⬅/➡ to adjust the level.

11 Receiver controls

AUTO/DIRECT – Press to select Auto Surround or Stream Direct listening.

STEREO/A.L.C. – Switches between the stereo playback mode and the Front Stage Surround Advance mode.

STANDARD – Press for Standard decoding and to switch between the various ▯▯ Pro Logic IIx and Neo:6 options.

ADV SURR – Use to switch between the various surround modes.

THX – Press to select a Home THX listening mode.

12 Number buttons and other receiver/component controls

Use the number buttons to directly select a radio frequency or the tracks on a CD, DVD, etc.

ENTER can be used to enter commands for TV or DTV.

After set the remote control operation switch to **RCV**:

SIGNAL SEL – Use to select an input signal.

SLEEP – Use to put the receiver in sleep mode and select the amount of time before sleep.

DIMMER – Dims or brightens the display.

SR+ – Switches the SR+ mode on/off.

SBch – Use to select the surround/virtual surround back channel mode.

MCACC – Press to switch between MCACC presets.

A.ATT – Attenuates (lowers) the level of an analog input signal to prevent distortion.

GENRE – Automatically selects the most appropriate Advanced Surround mode for the genre of the source currently being played back (this feature is available only when a Pioneer DVD recorder supporting HDMI Control is connected to this receiver via HDMI).

SC-LX81 only: **HDMI OUT** – Switch the HDMI output terminal.

Press **TUNER** first to access:

D.ACCESS – After pressing, you can access a radio station directly using the number buttons.

CLASS – Switches between the three banks (classes) of radio station presets.

13 SOURCE ⏻

Press to turn on/off other components connected to the receiver.

14 Remote control illumination button

Press to turn on/off the illumination of some of the buttons and the LCD light.

15 Remote control operation selector switch

Set to **RCV** to operate the receiver, **TV** or **SOURCE** to operate the TV or the source device.

When this switch is set to **RCV**, the receiver can be controlled (used to select the white commands above the number buttons (**A.ATT**, etc.)). Also use this switch to set up surround sound.

16 VOL +/–

Use to set the listening volume.

17 MUTE

Mutes the sound or restores the sound if it has been muted (adjusting the volume also restores the sound).

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

To keep the product quality after servicing, confirm recommended check points shown below.

No.	Procedures	Item to be checked
1	Confirm whether the customer complain has been solved. If the customer complain occurs with the particular source, such as Dolby Digital, DTS, AAC, DVD-A and HDMI, input it for the operation check.	The customer complain must not be reappeared. Video, Audio and operations must be normal.
2	Check the analog audio playback. (Make the analog connections with a DVD player.)	Each channel audio and operations must be normal.
3	Check the digital audio playback. (Make the digital connections with a DVD player.)	Each channel audio and operations must be normal.
4	Check surround playback. (Select Surround mode and check the multichannel operations via the DSP circuit.)	Each channel audio and operations must be normal.
5	Check the video outputs. (Connect with a DVD player.)	Video and operations must be normal.
6	Check the sound from headphone output.	Sound must be normal, without noise.
7	Check the appearance of the product.	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding video and audio:

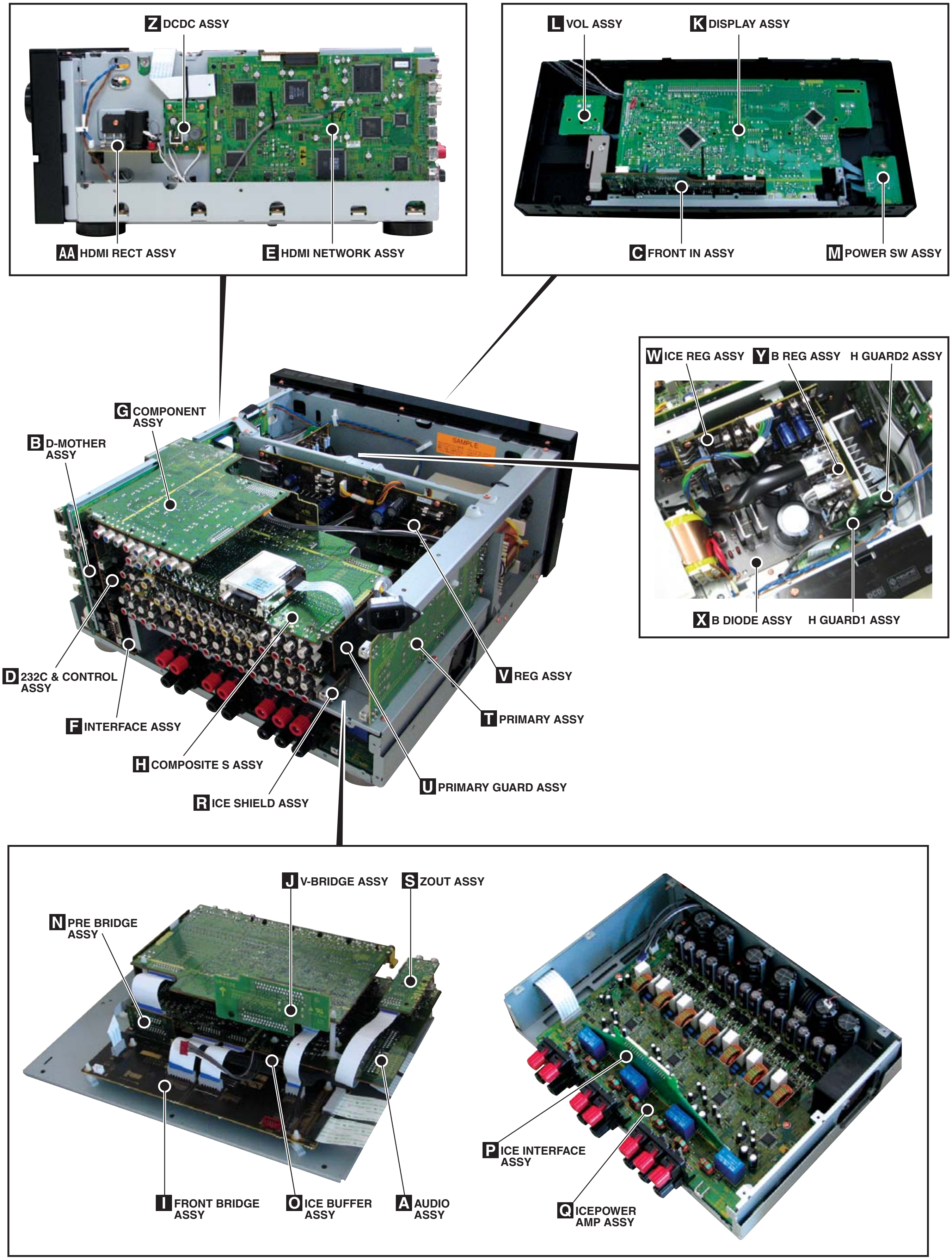
Items to be checked regarding video	Item to be checked regarding audio
Block noise	Distortion
Horizontal noise	Noise
Dot noise	Volume too low
Disturbed image (video jumpiness)	Volume too high
Too dark	Volume fluctuating
Too bright	Sound interrupted
Mottled color	

● Cleaning the Fan

Before shipment, be sure to clean the fan, using the following cleaning materials:

Cleaning paper : GED-008

3.2 PCB LOCATIONS


Z DCDC ASSY
AA HDMI RECT ASSY
E HDMI NETWORK ASSY
L VOL ASSY
K DISPLAY ASSY
C FRONT IN ASSY
M POWER SW ASSY
W ICE REG ASSY
Y B REG ASSY
H GUARD2 ASSY
X B DIODE ASSY
H GUARD1 ASSY
G COMPONENT ASSY
B D-MOTHER ASSY
D 232C & CONTROL ASSY
F INTERFACE ASSY
H COMPOSITE S ASSY
R ICE SHIELD ASSY
V REG ASSY
T PRIMARY ASSY
U PRIMARY GUARD ASSY
J V-BRIDGE ASSY
S ZOUT ASSY
N PRE BRIDGE ASSY
I FRONT BRIDGE ASSY
O ICE BUFFER ASSY
A AUDIO ASSY
P ICE INTERFACE ASSY
Q ICEPOWER AMP ASSY
SAMPLE

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

◆ LIST OF ASSEMBLIES

Mark	Symbol and Description	SC-LX81 /HYSXJ5	SC-LX71 /HYSXJ5
	1..ICEPOWER AMP ASSY	AWH7017	AWH7017
NSP	1..COMPOSITE ICE ASSY	AWM8106	AWM8106
	2..COMPOSITE S ASSY	AWX9144	AWX9144
	2..ICE BUFFER ASSY	AWX9145	AWX9145
	2..PRE BRIDGE ASSY	AWX9146	AWX9146
	2..ICE SHIELD ASSY	AWX9173	AWX9173
NSP	1..PRIM DISPLAY ASSY	AWM8120	AWM8129
	2..PRIMARY ASSY	AWX9166	AWX9166
	2..HDMI RECT ASSY	AWX9156	AWX9156
	2..DISPLAY ASSY	AWX9158	AWX9238
	2..VOL ASSY	AWX9159	AWX9159
	2..POWER SW ASSY	AWX9160	AWX9160
	2..V-BRIDGE ASSY	AWX9161	AWX9161
NSP	1..DIGITAL MOTHER ASSY	AWP7058	AWP7064
	2..D-MOTHER ASSY	AWX9196	AWX9202
	2..ICE INTERFACE ASSY	AWX9137	AWX9137
	2..DCDC ASSY	AWX9138	AWX9138
	2..H GUARD2 ASSY	AWX9147	AWX9147
	2..H GUARD1 ASSY	AWX9174	AWX9174
NSP	1..COMPONENT FIN ASSY	AWQ7058	AWQ7061
	2..COMPONENT ASSY	AWX9141	AWX9211
	2..FRONT IN ASSY	AWX9142	AWX9142
	2..ZOUT ASSY	AWX9143	AWX9143
NSP	1..INTERFACE REG ASSY	AWR7067	AWR7067
	2..INTERFACE ASSY	AWX9148	AWX9148
	2..ICE REG ASSY	AWX9149	AWX9149
	2..B REG ASSY	AWX9150	AWX9150
	2..B DIODE ASSY	AWX9171	AWX9171
NSP	1..FBRIDGE REG ASSY	AWR7068	AWR7068
	2..REG ASSY	AWX9152	AWX9152
	2..FRONT BRIDGE ASSY	AWX9155	AWX9155
NSP	1..AUDIO ASSY	AWR7071	AWR7071
	2..AUDIO ASSY	AWX9206	AWX9206
	2..232C & CONTROL ASSY	AWX9209	AWX9209
	2..PRIMARY GUARD ASSY	AWX9172	AWX9172
	1..HDMI NETWORK ASSY	AWX9234	AWX9235
	1..FM/AM TUNER UNIT	AXX7248	AXX7248

3.3 JIGS LIST

[1] Jigs List

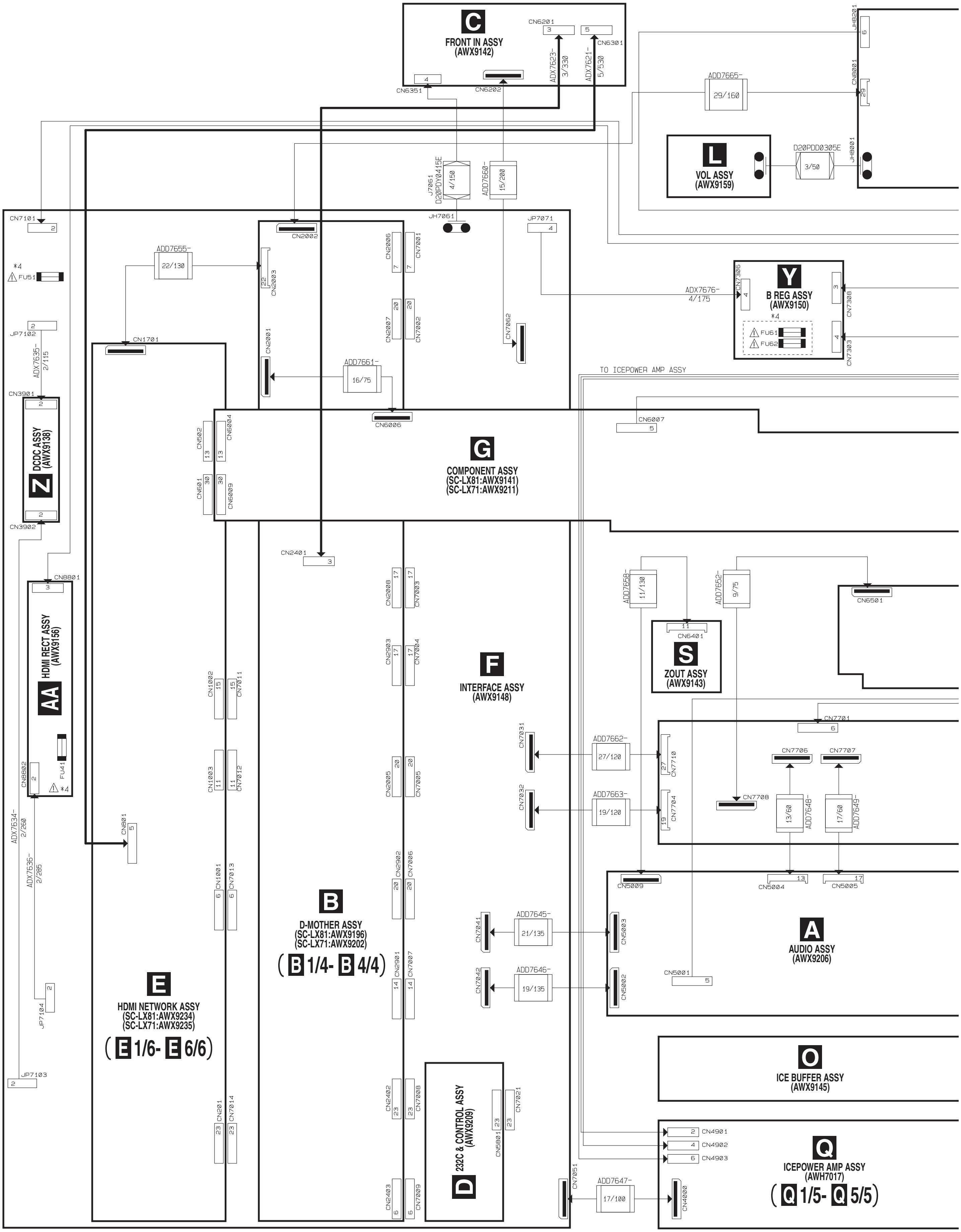
Name	Jig No.	Remarks
27P FFC	GGD1588	Diagnosis
19P FFC	GGD1589	Diagnosis
21P FFC	GGD1590	Diagnosis
16P FFC	GGD1591	Diagnosis
30p+13p board to board extension cable	GGD1592	Diagnosis
17p+19p board to board extension cable	GGD1593	Diagnosis
5p extension cable	GGD1594	Diagnosis

[2] Lubricants and Glues List

Name	Lubricants and Glues No.	Remarks
Lubicating Oil	GYA1001	Refer to “9.5 FRONT PANEL SECTION”
Silicone Grease	GEM1057	Refer to “9.3 CHASSIS SECTION”

4. BLOCK DIAGRAM

4.1 OVERALL WIRING DIAGRAM



C
FRONT IN ASSY
(AWX9142)
CN6201
3
5
CN6301
ADX7623-
3/330
ADX7621-
5/530
4
CN6351
CN6202
JH8201
6
ADD7665-
29/160
CN8001
29
L
VOL ASSY
(AWX9159)
D20PDD0305E
3/50
JH8001
J7061
D20PDY0415E
4/150
ADD7660-
15/200
JH7061
CN7101
2
*4
FU51
CN2002
JP7071
4
ADD7655-
22/130
22
CN2003
CN2006
7
CN7001
7
20
CN2007
20
CN7002
Y
B REG ASSY
(AWX9150)
CN7306
4
ADX7676-
4/175
3
CN7308
*4
FU61
FU62
4
CN7303
2
JP7102
ADX7635-
2/115
CN1701
CN2001
CN7062
ADD7661-
16/75
TO ICEPOWER AMP ASSY
CN3901
2
Z
DCDC ASSY
(AWX9138)
2
CN3902
CN6006
CN502
13
CN6004
13
CN601
30
30
CN6009
G
COMPONENT ASSY
(SC-LX81:AWX9141)
(SC-LX71:AWX9211)
CN6007
5
CN8801
3
AA
HDMI RECT ASSY
(AWX9156)
FU41
CN8802
2
*4
CN2401
3
CN2008
17
17
CN7003
ADD7658-
11/130
ADD7652-
9/75
CN6501
11
CN6401
S
ZOUT ASSY
(AWX9143)
CN2903
17
17
CN7004
F
INTERFACE ASSY
(AWX9148)
CN1002
15
15
CN7011
CN7701
6
CN7031
ADD7662-
27/120
27
CN7710
CN7706
CN7707
CN1003
11
11
CN7012
CN2005
20
20
CN7005
CN7032
ADD7663-
19/120
19
CN7704
CN7708
13/60
ADD7648-
17/60
ADD7649-
ADX7634-
2/260
CN801
5
ADX7636-
2/285
CN1001
6
6
CN7013
CN2902
20
20
CN7006
CN5009
CN5004
13
CN5005
17
B
D-MOTHER ASSY
(SC-LX81:AWX9196)
(SC-LX71:AWX9202)
(B 1/4- B 4/4)
CN7041
ADD7645-
21/135
CN5003
A
AUDIO ASSY
(AWX9206)
CN5001
5
JP7104
2
E
HDMI NETWORK ASSY
(SC-LX81:AWX9234)
(SC-LX71:AWX9235)
(E 1/6- E 6/6)
CN2901
14
14
CN7007
CN7042
ADD7646-
19/135
CN5002
O
ICE BUFFER ASSY
(AWX9145)
JP7103
2
CN2402
23
23
CN7008
D
232C & CONTROL ASSY
(AWX9209)
CN5801
23
23
CN7021
CN201
23
23
CN7014
2
CN4901
4
CN4902
6
CN4903
Q
ICEPOWER AMP ASSY
(AWH7017)
(Q 1/5- Q 5/5)
CN2403
6
6
CN7009
CN7051
ADD7647-
17/100
CN4000

CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

*4 ⚠

	FU1	FU2	FU11, FU12	FU13, FU14	FU15	FU21, FU22	FU31, FU32	FU41	FU51	FU61, FU62
HYS	REK1029- (T5A L/250V)	–	REK1022- (T1A L/250V)	REK1021- (T800mA L/250V)	REK1022- (T1A L/250V)	REK1021- (T800mA L/250V)	REK1021- (T800mA L/250V)	REK1027- (T3.15A L/250V)	REK1024- (T1.6A L/250V)	REK1154- (10A/125V)

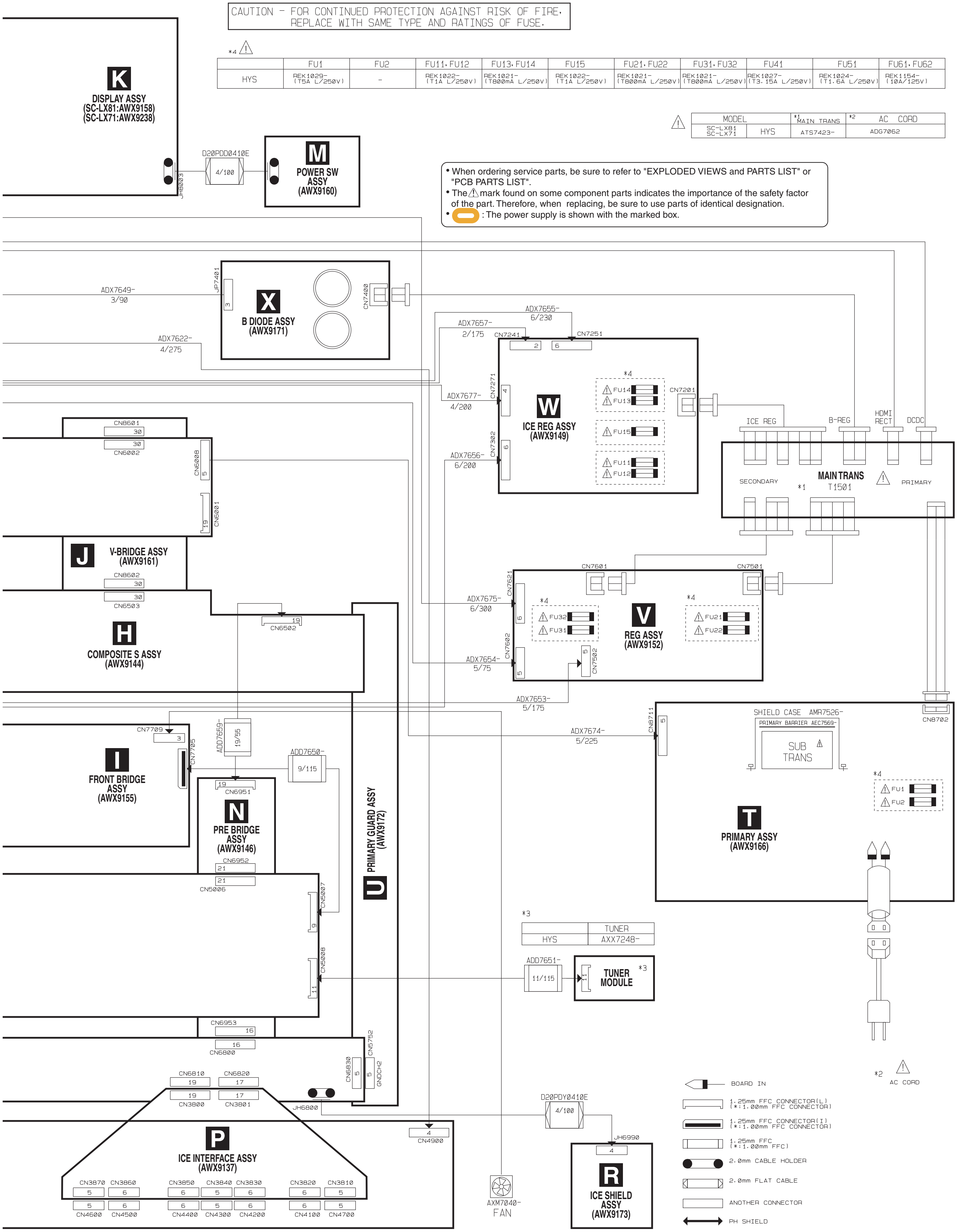
⚠

MODEL		*1 MAIN TRANS	*2 AC CORD
SC-LX81 SC-LX71	HYS	ATS7423-	ADG7062

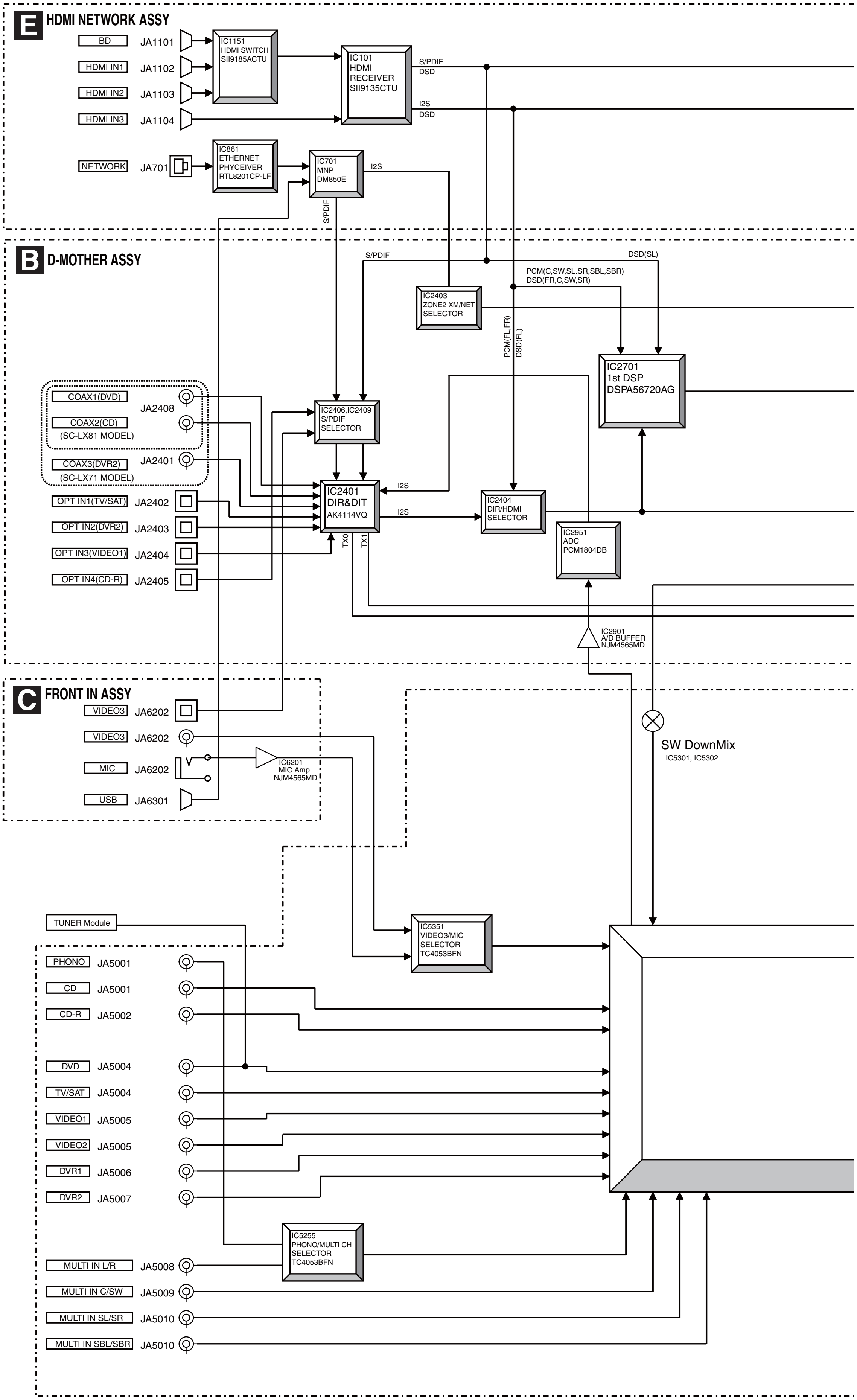
- When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- ⬭ : The power supply is shown with the marked box.

*3

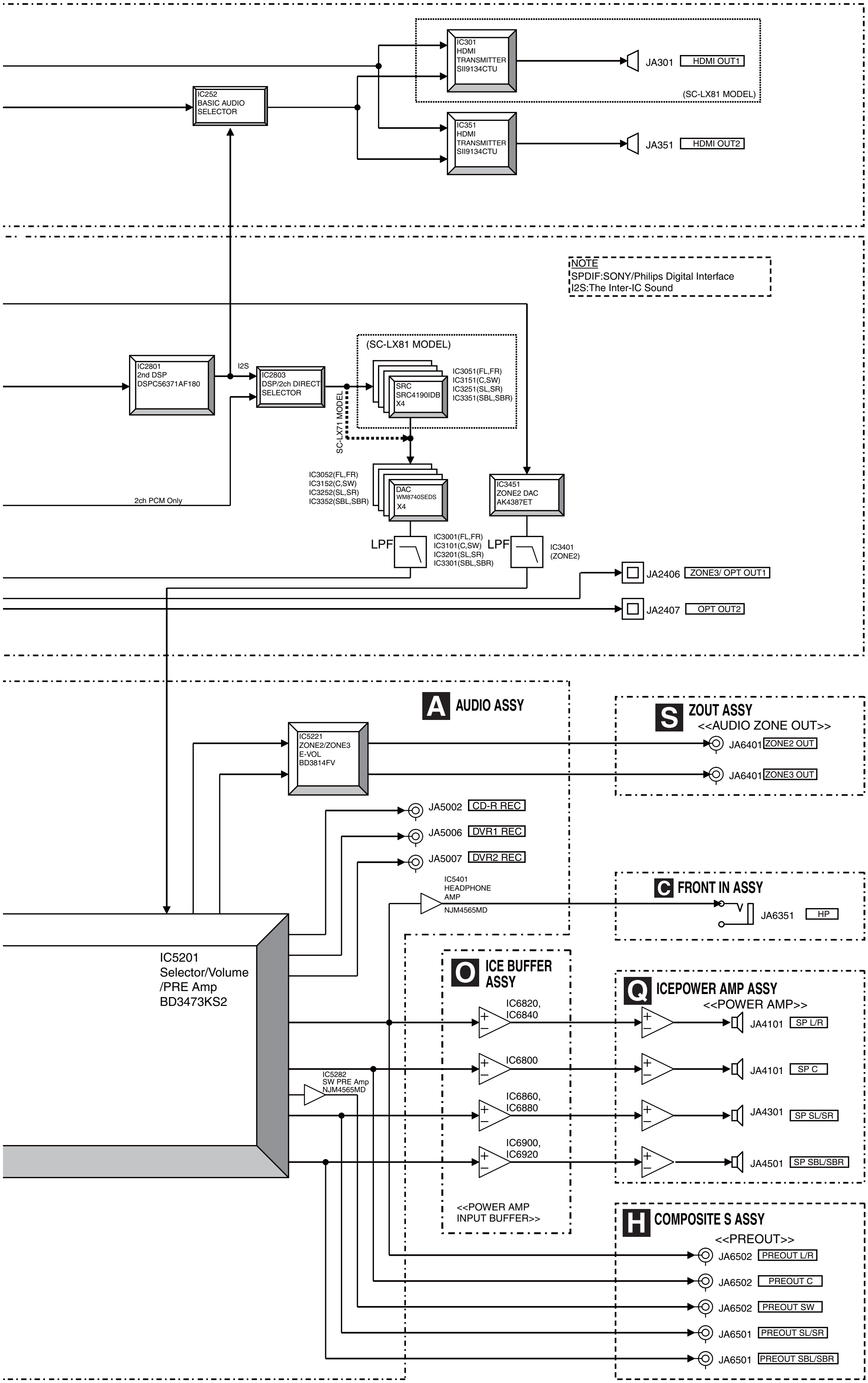
	TUNER
HYS	AXX7248-


K
DISPLAY ASSY
(SC-LX81:AWX9158)
(SC-LX71:AWX9238)
JH8003
D20PDD0410E
4/100
M
POWER SW ASSY
(AWX9160)
ADX7649-
3/90
JP7401
3
X
B DIODE ASSY
(AWX9171)
CN7400
ADX7622-
4/275
ADX7655-
6/230
ADX7657-
2/175
CN7241
2
CN7251
6
CN7271
4
ADX7677-
4/200
W
ICE REG ASSY
(AWX9149)
*4
FU14
FU13
FU15
FU11
FU12
CN7201
CN7302
6
ADX7656-
6/200
ICE REG
B-REG
HDMI RECT
DCDC
SECONDARY
MAIN TRANS
T1501
*1
PRIMARY
CN8601
30
CN6002
CN6008
5
CN6001
19
J
V-BRIDGE ASSY
(AWX9161)
CN8602
30
CN6503
H
COMPOSITE S ASSY
(AWX9144)
19
CN6502
CN7601
CN7501
CN7621
6
ADX7675-
6/300
*4
FU32
FU31
V
REG ASSY
(AWX9152)
FU21
FU22
CN7602
5
ADX7654-
5/75
CN7502
ADX7653-
5/175
CN7709
3
CN7705
I
FRONT BRIDGE ASSY
(AWX9155)
ADD7659-
19/55
ADD7650-
9/115
19
CN6951
N
PRE BRIDGE ASSY
(AWX9146)
CN6952
21
CN5006
CN5007
9
U
PRIMARY GUARD ASSY
(AWX9172)
ADX7674-
5/225
CN8711
5
SHIELD CASE AMR7526-
PRIMARY BARRIER AEC7569-
SUB TRANS
CN8702
*4
FU1
FU2
T
PRIMARY ASSY
(AWX9166)
ADD7651-
11/115
11
TUNER MODULE
*3
CN5008
11
CN6953
16
CN6800
CN5752
CN6830
5
GNDCH2
CN6810
19
CN6820
17
CN3800
CN3801
JH6800
D20PDY0410E
4/100
JH6990
4
CN4900
P
ICE INTERFACE ASSY
(AWX9137)
CN3870
CN3860
CN3850
CN3840
CN3830
CN3820
CN3810
5
6
CN4600
CN4500
CN4400
CN4300
CN4200
CN4100
CN4700
AXM7040-
FAN
R
ICE SHIELD ASSY
(AWX9173)
*2
AC CORD
BOARD IN
1.25mm FFC CONNECTOR(L)
(*:1.00mm FFC CONNECTOR)
1.25mm FFC CONNECTOR(I)
(*:1.00mm FFC CONNECTOR)
1.25mm FFC
(*:1.00mm FFC)
2.0mm CABLE HOLDER
2.0mm FLAT CABLE
ANOTHER CONNECTOR
PH SHIELD
A
B
C
D
E
F

4.2 AUDIO BLOCK DIAGRAM

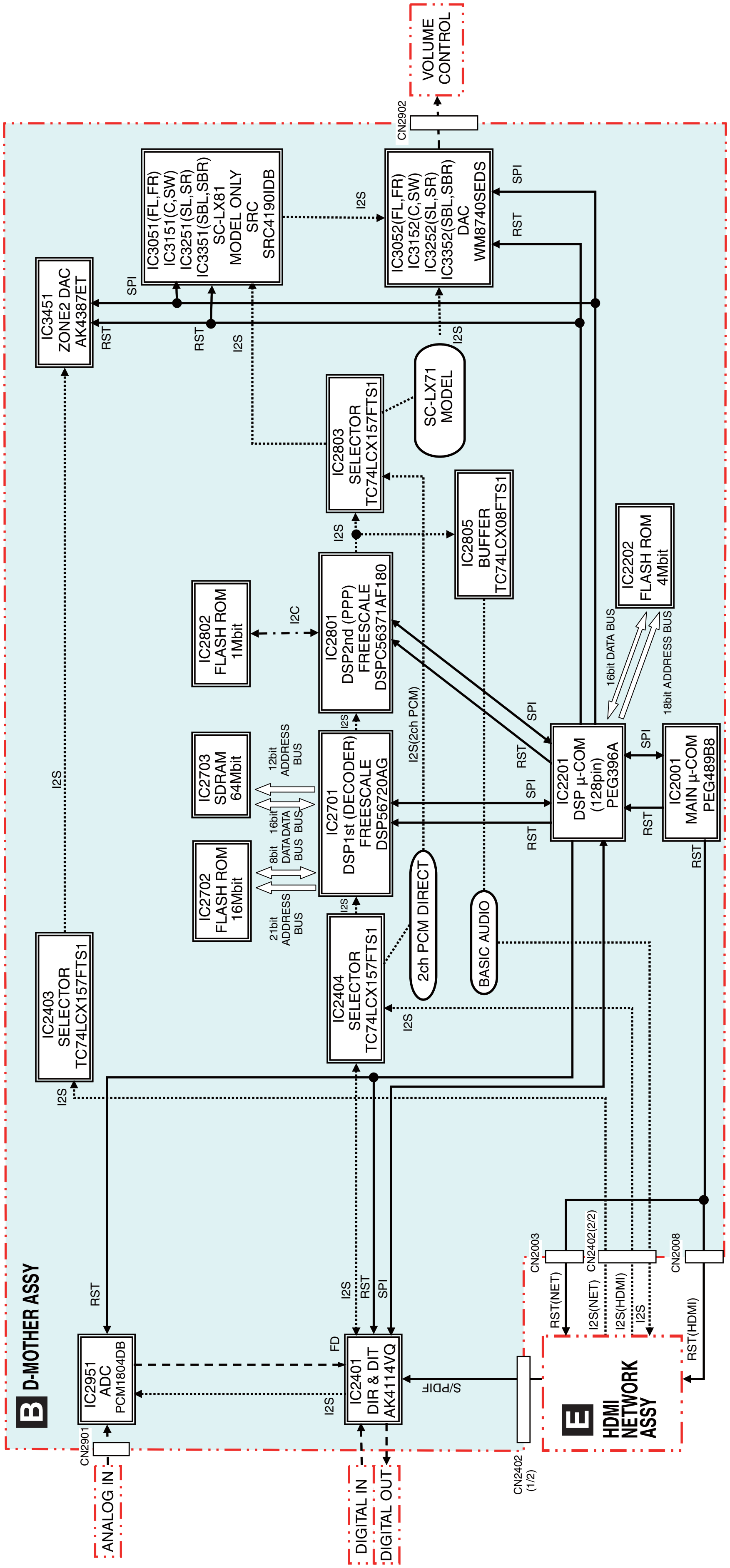


E HDMI NETWORK ASSY
BD
JA1101
HDMI IN1
JA1102
HDMI IN2
JA1103
HDMI IN3
JA1104
IC1151 HDMI SWITCH SII9185ACTU
IC101 HDMI RECEIVER SII9135CTU
S/PDIF
DSD
I2S
DSD
NETWORK
JA701
IC861 ETHERNET PHYCEIVER RTL8201CP-LF
IC701 MNP DM850E
I2S
S/PDIF
B D-MOTHER ASSY
S/PDIF
DSD(SL)
PCM(C,SW,SL.SR,SBL,SBR)
DSD(FR,C,SW,SR)
IC2403 ZONE2 XM/NET SELECTOR
PCM(FL,FR)
DSD(FL)
IC2701 1st DSP DSPA56720AG
COAX1(DVD)
JA2408
COAX2(CD)
(SC-LX81 MODEL)
IC2406,IC2409 S/PDIF SELECTOR
COAX3(DVR2)
JA2401
(SC-LX71 MODEL)
OPT IN1(TV/SAT)
JA2402
OPT IN2(DVR2)
JA2403
OPT IN3(VIDEO1)
JA2404
OPT IN4(CD-R)
JA2405
IC2401 DIR&DIT AK4114VQ
I2S
I2S
TX0
TX1
IC2404 DIR/HDMI SELECTOR
IC2951 ADC PCM1804DB
IC2901 A/D BUFFER NJM4565MD
C FRONT IN ASSY
VIDEO3
JA6202
VIDEO3
JA6202
MIC
JA6202
IC6201 MIC Amp NJM4565MD
USB
JA6301
SW DownMix
IC5301, IC5302
TUNER Module
IC5351 VIDEO3/MIC SELECTOR TC4053BFN
PHONO
JA5001
CD
JA5001
CD-R
JA5002
DVD
JA5004
TV/SAT
JA5004
VIDEO1
JA5005
VIDEO2
JA5005
DVR1
JA5006
DVR2
JA5007
IC5255 PHONO/MULTI CH SELECTOR TC4053BFN
MULTI IN L/R
JA5008
MULTI IN C/SW
JA5009
MULTI IN SL/SR
JA5010
MULTI IN SBL/SBR
JA5010

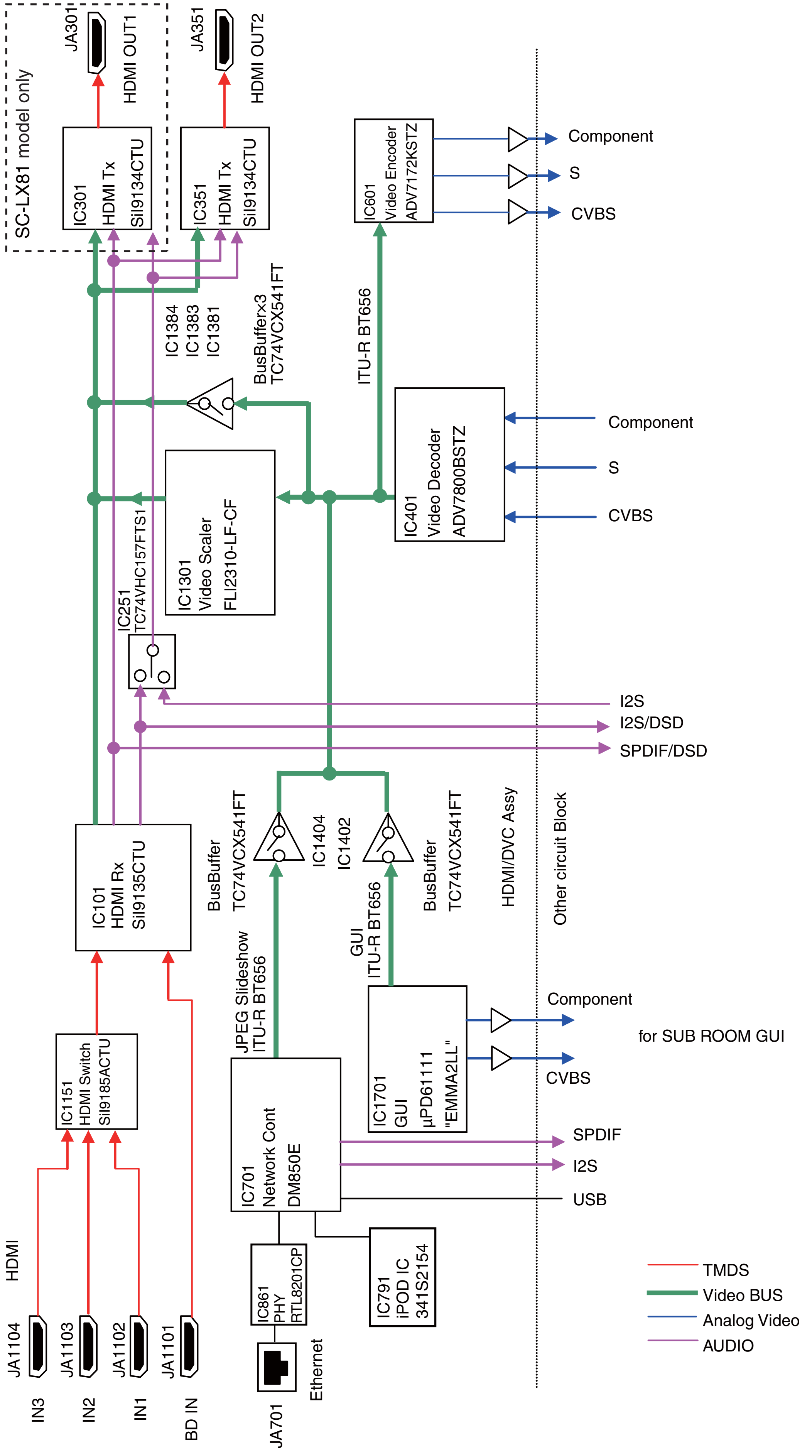


IC301
HDMI
TRANSMITTER
SII9134CTU
JA301
HDMI OUT1
(SC-LX81 MODEL)
IC252
BASIC AUDIO
SELECTOR
IC351
HDMI
TRANSMITTER
SII9134CTU
JA351
HDMI OUT2
NOTE
SPDIF:SONY/Philips Digital Interface
I2S:The Inter-IC Sound
(SC-LX81 MODEL)
IC2801
2nd DSP
DSPC56371AF180
I2S
IC2803
DSP/2ch DIRECT
SELECTOR
SRC
SRC4190IDB
X4
IC3051(FL,FR)
IC3151(C,SW)
IC3251(SL,SR)
IC3351(SBL,SBR)
SC-LX71 MODEL
IC3052(FL,FR)
IC3152(C,SW)
IC3252(SL,SR)
IC3352(SBL,SBR)
DAC
WM8740SEDS
X4
IC3451
ZONE2 DAC
AK4387ET
2ch PCM Only
LPF
IC3001(FL,FR)
IC3101(C,SW)
IC3201(SL,SR)
IC3301(SBL,SBR)
LPF
IC3401
(ZONE2)
JA2406
ZONE3/ OPT OUT1
JA2407
OPT OUT2
A AUDIO ASSY
IC5221
ZONE2/ZONE3
E-VOL
BD3814FV
S ZOUT ASSY
<<AUDIO ZONE OUT>>
JA6401 ZONE2 OUT
JA6401 ZONE3 OUT
JA5002 CD-R REC
JA5006 DVR1 REC
JA5007 DVR2 REC
IC5401
HEADPHONE
AMP
NJM4565MD
C FRONT IN ASSY
JA6351 HP
IC5201
Selector/Volume
/PRE Amp
BD3473KS2
O ICE BUFFER
ASSY
IC6820,
IC6840
IC6800
IC6860,
IC6880
IC6900,
IC6920
<<POWER AMP
INPUT BUFFER>>
IC5282
SW PRE Amp
NJM4565MD
Q ICEPOWER AMP ASSY
<<POWER AMP>>
JA4101 SP L/R
JA4101 SP C
JA4301 SP SL/SR
JA4501 SP SBL/SBR
H COMPOSITE S ASSY
<<PREOUT>>
JA6502 PREOUT L/R
JA6502 PREOUT C
JA6502 PREOUT SW
JA6501 PREOUT SL/SR
JA6501 PREOUT SBL/SBR

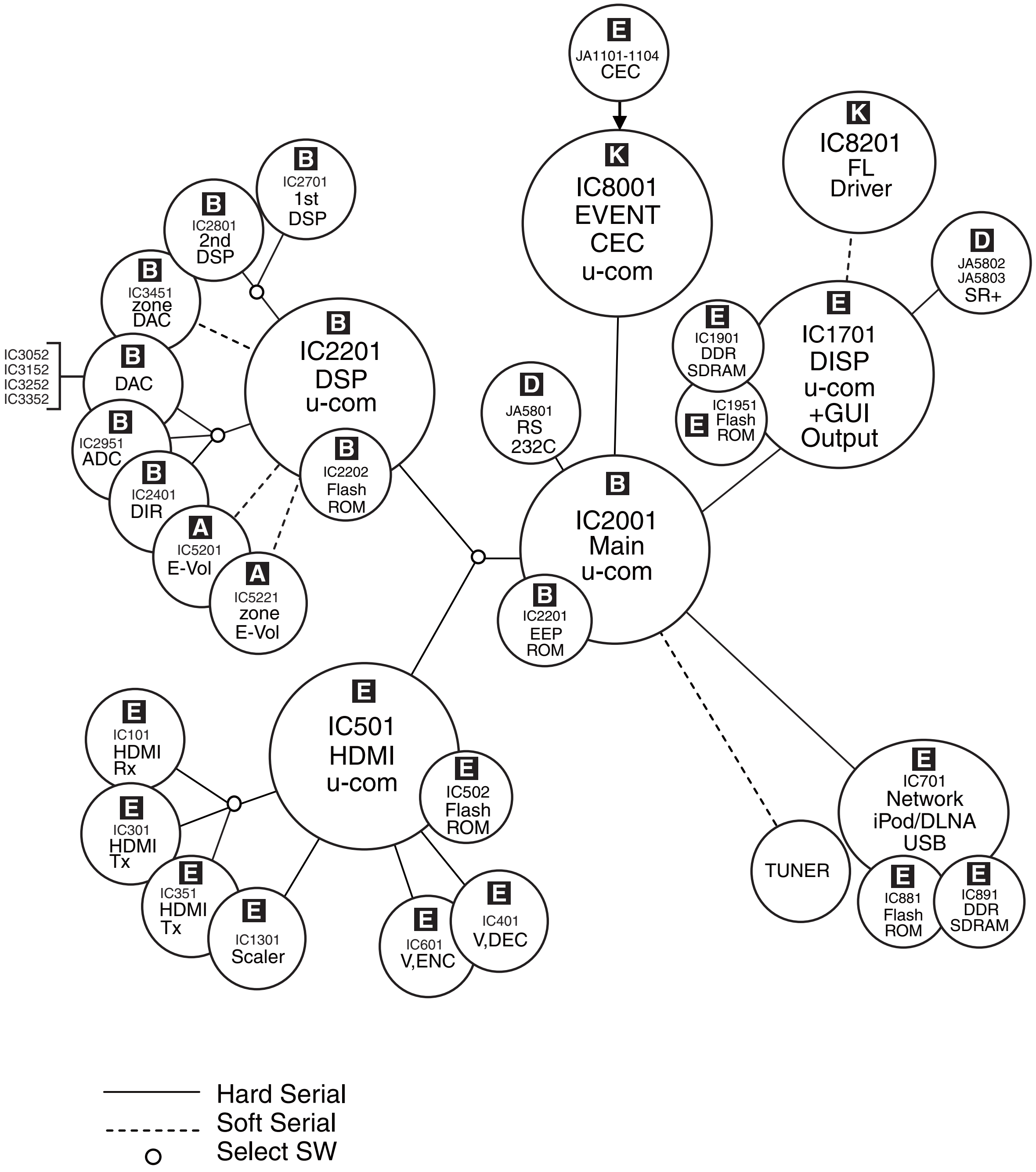
4.3 DSP BLOCK DIAGRAM


VOLUME CONTROL
CN2902
IC3051(FL,FR)
IC3151(C,SW)
IC3251(SL,SR)
IC3351(SBL,SBR)
SC-LX81 MODEL ONLY
SRC
SRC4190IDB
I2S
IC3052(FL,FR)
IC3152(C,SW)
IC3252(SL,SR)
IC3352(SBL,SBR)
DAC
WM8740SEDS
SPI
RST
IC3451
ZONE2 DAC
AK4387ET
SPI
RST
RST
I2S
I2S
SC-LX71 MODEL
IC2803
SELECTOR
TC74LCX157FTS1
IC2805
BUFFER
TC74LCX08FTS1
I2S
IC2202
FLASH ROM
4Mbit
16bit DATA BUS
18bit ADDRESS BUS
IC2802
FLASH ROM
1Mbit
I2C
IC2801
DSP2nd (PPP)
FREESCALE
DSPC56371AF180
SPI
RST
I2S(2ch PCM)
IC2703
SDRAM
64Mbit
12bit ADDRESS BUS
16bit DATA BUS
8bit DATA BUS
21bit ADDRESS BUS
IC2702
FLASH ROM
16Mbit
I2S
IC2701
DSP1st (DECODER)
FREESCALE
DSP56720AG
SPI
RST
IC2201
DSP µ-COM
(128pin)
PEG396A
SPI
RST
IC2001
MAIN µ-COM
PEG489B8
RST
I2S
2ch PCM DIRECT
BASIC AUDIO
IC2404
SELECTOR
TC74LCX157FTS1
I2S
I2S
IC2403
SELECTOR
TC74LCX157FTS1
I2S
B D-MOTHER ASSY
RST
I2S
RST
SPI
FD
I2S
IC2951
ADC
PCM1804DB
IC2401
DIR & DIT
AK4114VQ
S/PDIF
CN2003
CN2402(2/2)
CN2008
RST(NET)
I2S(NET)
I2S(HDMI)
I2S
RST(HDMI)
E HDMI NETWORK ASSY
CN2402
(1/2)
CN2901
ANALOG IN
DIGITAL IN
DIGITAL OUT

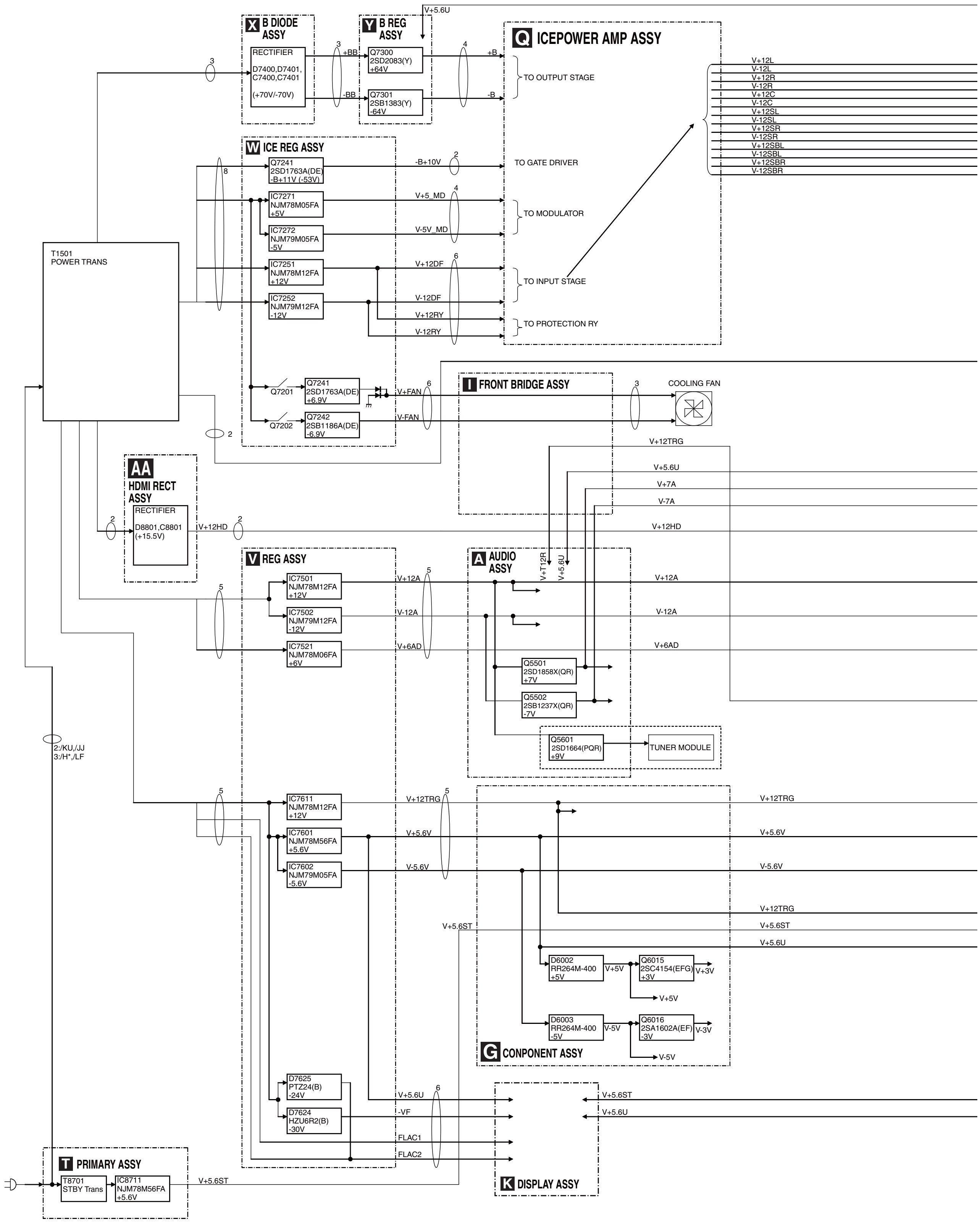
4.4 HDMI NETWORK BLOCK DIAGRAM

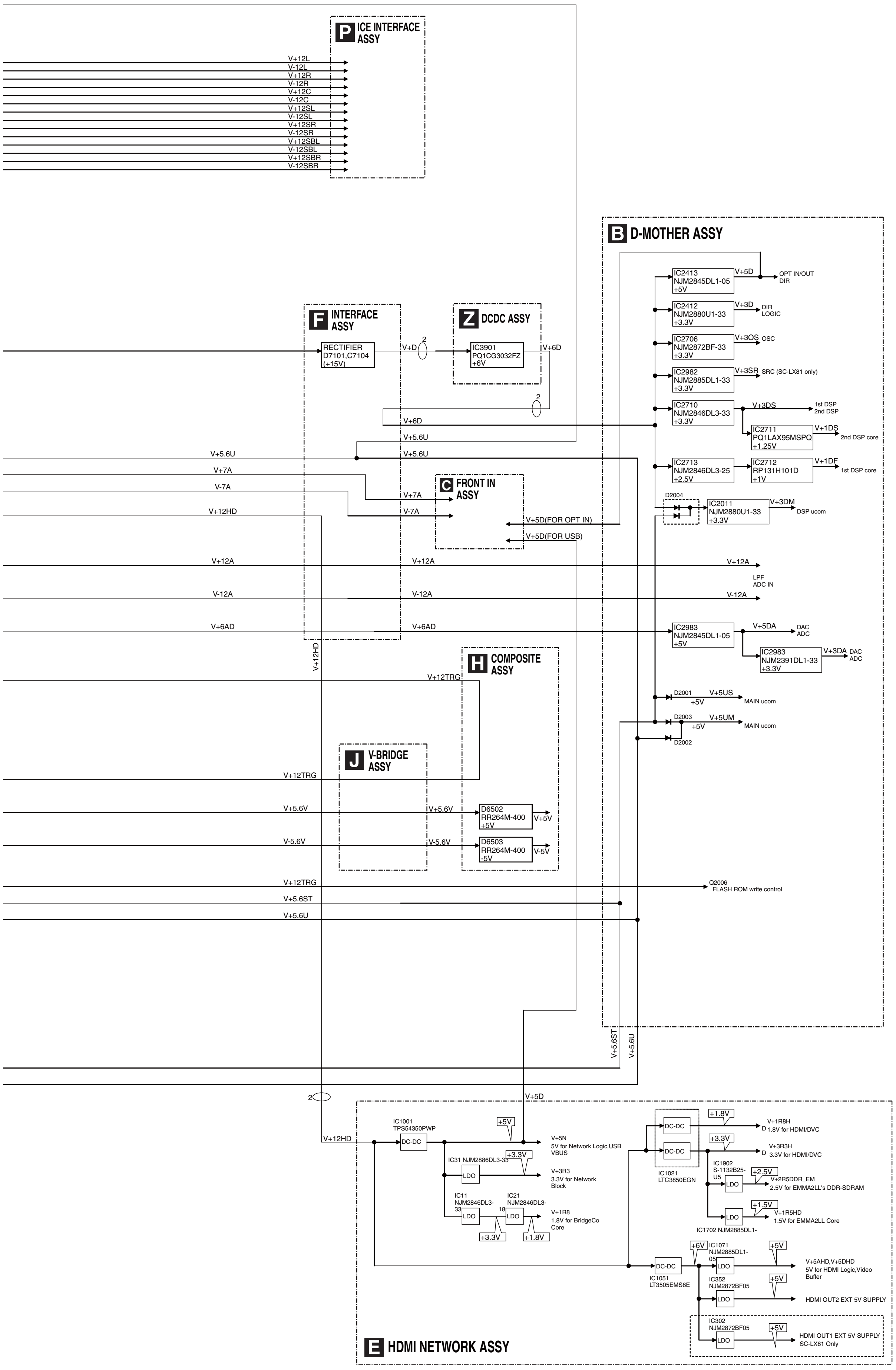

SC-LX81 model only
JA301
HDMI OUT1
JA351
HDMI OUT2
IC301
HDMI Tx
SiI9134CTU
IC351
HDMI Tx
SiI9134CTU
IC601
Video Encoder
ADV7172KSTZ
Component
S
CVBS
IC1384
IC1383
IC1381
BusBufferx3
TC74VCX541FT
ITU-R BT656
IC401
Video Decoder
ADV7800BSTZ
Component
S
CVBS
IC1301
Video Scaler
FLI2310-LF-CF
IC251
TC74VHC157FTS1
I2S
I2S/DSD
SPDIF/DSD
IC101
HDMI Rx
SiI9135CTU
BusBuffer
TC74VCX541FT
IC1404
IC1402
BusBuffer
TC74VCX541FT
HDMI/DVC Assy
Other circuit Block
JPEG Slideshow
ITU-R BT656
GUI
ITU-R BT656
Component
for SUB ROOM GUI
CVBS
IC1151
HDMI Switch
SiI9185ACTU
IC1701
GUI
µPD61111
"EMMA2LL"
IC701
Network Cont
DM850E
SPDIF
I2S
USB
HDMI
IC861
PHY
RTL8201CP
IC791
iPOD IC
341S2154
JA1104
JA1103
JA1102
JA1101
IN3
IN2
IN1
BD IN
JA701
Ethernet
TMDS
Video BUS
Analog Video
AUDIO

4.5 MICROCOMPUTER BLOCK DIAGRAM


E
JA1101-1104
CEC
K
IC8001
EVENT
CEC
u-com
K
IC8201
FL
Driver
D
JA5802
JA5803
SR+
E
IC1701
DISP
u-com
+GUI
Output
E
IC1901
DDR
SDRAM
E
IC1951
Flash
ROM
B
IC2701
1st
DSP
B
IC2801
2nd
DSP
B
IC3451
zone
DAC
IC3052
IC3152
IC3252
IC3352
B
DAC
B
IC2951
ADC
B
IC2401
DIR
A
IC5201
E-Vol
A
IC5221
zone
E-Vol
B
IC2201
DSP
u-com
B
IC2202
Flash
ROM
D
JA5801
RS
232C
B
IC2001
Main
u-com
B
IC2201
EEP
ROM
E
IC501
HDMI
u-com
E
IC502
Flash
ROM
E
IC101
HDMI
Rx
E
IC301
HDMI
Tx
E
IC351
HDMI
Tx
E
IC1301
Scaler
E
IC601
V,ENC
E
IC401
V,DEC
TUNER
E
IC701
Network
iPod/DLNA
USB
E
IC881
Flash
ROM
E
IC891
DDR
SDRAM
Hard Serial
Soft Serial
Select SW

4.6 POWER BLOCK DIAGRAM

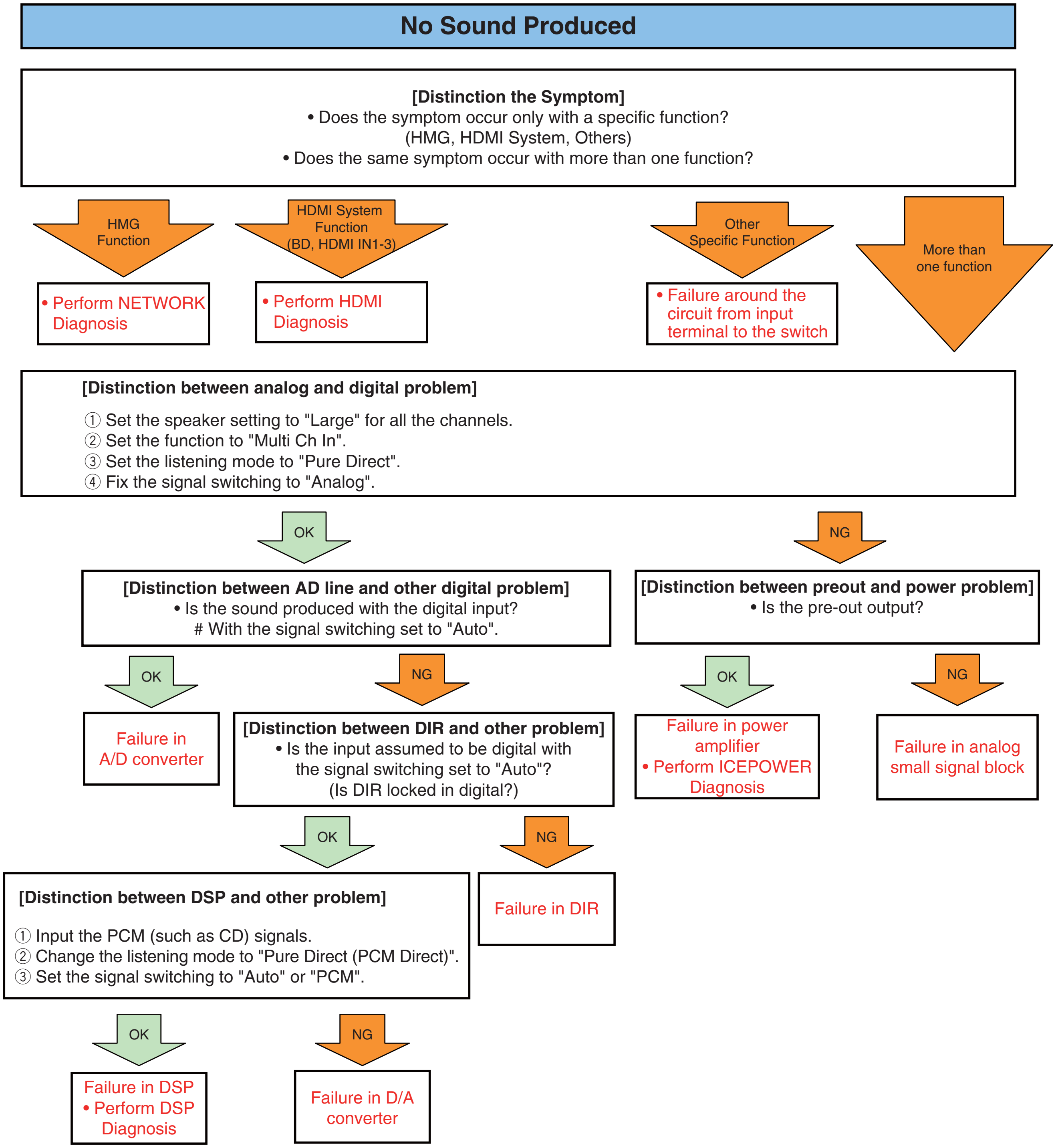

A
B
C
D
E
F
V+5.6U
X B DIODE ASSY
RECTIFIER
D7400,D7401,
C7400,C7401
(+70V/-70V)
Y B REG ASSY
Q7300
2SD2083(Y)
+64V
Q7301
2SB1383(Y)
-64V
+BB
-BB
+B
-B
3
4
Q ICEPOWER AMP ASSY
TO OUTPUT STAGE
TO GATE DRIVER
TO MODULATOR
TO INPUT STAGE
TO PROTECTION RY
V+12L
V-12L
V+12R
V-12R
V+12C
V-12C
V+12SL
V-12SL
V+12SR
V-12SR
V+12SBL
V-12SBL
V+12SBR
V-12SBR
W ICE REG ASSY
8
Q7241
2SD1763A(DE)
-B+11V (-53V)
-B+10V
2
IC7271
NJM78M05FA
+5V
V+5_MD
IC7272
NJM79M05FA
-5V
V-5V_MD
IC7251
NJM78M12FA
+12V
V+12DF
6
IC7252
NJM79M12FA
-12V
V-12DF
V+12RY
V-12RY
T1501
POWER TRANS
Q7201
Q7241
2SD1763A(DE)
+6.9V
Q7202
Q7242
2SB1186A(DE)
-6.9V
V+FAN
V-FAN
I FRONT BRIDGE ASSY
COOLING FAN
V+12TRG
V+5.6U
V+7A
V-7A
AA HDMI RECT ASSY
RECTIFIER
D8801,C8801
(+15.5V)
V+12HD
V REG ASSY
5
IC7501
NJM78M12FA
+12V
V+12A
IC7502
NJM79M12FA
-12V
V-12A
IC7521
NJM78M06FA
+6V
V+6AD
A AUDIO ASSY
V+T12R
V+5.6U
Q5501
2SD1858X(QR)
+7V
Q5502
2SB1237X(QR)
-7V
Q5601
2SD1664(PQR)
+9V
TUNER MODULE
2:/KU,/JJ
3:/H*,/LF
IC7611
NJM78M12FA
+12V
V+12TRG
IC7601
NJM78M56FA
+5.6V
V+5.6V
IC7602
NJM79M05FA
-5.6V
V-5.6V
V+12TRG
V+5.6ST
V+5.6U
D6002
RR264M-400
+5V
V+5V
Q6015
2SC4154(EFG)
+3V
V+3V
V+5V
D6003
RR264M-400
-5V
V-5V
Q6016
2SA1602A(EF)
-3V
V-3V
V-5V
G CONPONENT ASSY
D7625
PTZ24(B)
-24V
D7624
HZU6R2(B)
-30V
V+5.6U
-VF
FLAC1
FLAC2
V+5.6ST
V+5.6U
K DISPLAY ASSY
T PRIMARY ASSY
T8701
STBY Trans
IC8711
NJM78M56FA
+5.6V
V+5.6ST


P ICE INTERFACE ASSY
V+12L
V-12L
V+12R
V-12R
V+12C
V-12C
V+12SL
V-12SL
V+12SR
V-12SR
V+12SBL
V-12SBL
V+12SBR
V-12SBR
B D-MOTHER ASSY
IC2413 NJM2845DL1-05 +5V
V+5D
OPT IN/OUT DIR
IC2412 NJM2880U1-33 +3.3V
V+3D
DIR LOGIC
IC2706 NJM2872BF-33 +3.3V
V+3OS
OSC
IC2982 NJM2885DL1-33 +3.3V
V+3SR
SRC (SC-LX81 only)
IC2710 NJM2846DL3-33 +3.3V
V+3DS
1st DSP 2nd DSP
IC2711 PQ1LAX95MSPQ +1.25V
V+1DS
2nd DSP core
IC2713 NJM2846DL3-25 +2.5V
IC2712 RP131H101D +1V
V+1DF
1st DSP core
D2004
IC2011 NJM2880U1-33 +3.3V
V+3DM
DSP ucom
F INTERFACE ASSY
RECTIFIER D7101,C7104 (+15V)
V+D
2
Z DCDC ASSY
IC3901 PQ1CG3032FZ +6V
V+6D
2
V+6D
V+5.6U
V+5.6U
V+5.6U
V+7A
V-7A
V+12HD
C FRONT IN ASSY
V+7A
V-7A
V+5D(FOR OPT IN)
V+5D(FOR USB)
V+12A
V+12A
V+12A
LPF ADC IN
V-12A
V-12A
V-12A
V+6AD
V+6AD
IC2983 NJM2845DL1-05 +5V
V+5DA
DAC ADC
IC2983 NJM2391DL1-33 +3.3V
V+3DA
DAC ADC
V+12HD
H COMPOSITE ASSY
V+12TRG
D2001 +5V V+5US MAIN ucom
D2003 +5V V+5UM MAIN ucom
D2002
J V-BRIDGE ASSY
V+12TRG
V+5.6V
V+5.6V
D6502 RR264M-400 +5V
V+5V
V-5.6V
V-5.6V
D6503 RR264M-400 -5V
V-5V
V+12TRG
Q2006 FLASH ROM write control
V+5.6ST
V+5.6U
V+5.6ST
V+5.6U
2
V+5D
V+12HD
IC1001 TPS54350PWP
DC-DC
+5V
V+5N 5V for Network Logic,USB VBUS
IC31 NJM2886DL3-33
+3.3V
LDO
V+3R3 3.3V for Network Block
IC11 NJM2846DL3-33
IC21 NJM2846DL3-18
LDO
LDO
+3.3V
+1.8V
V+1R8 1.8V for BridgeCo Core
DC-DC
DC-DC
IC1021 LTC3850EGN
+1.8V
V+1R8H D 1.8V for HDMI/DVC
+3.3V
V+3R3H D 3.3V for HDMI/DVC
IC1902 S-1132B25-U5
LDO
+2.5V
V+2R5DDR_EM 2.5V for EMMA2LL's DDR-SDRAM
LDO
+1.5V
V+1R5HD 1.5V for EMMA2LL Core
IC1702 NJM2885DL1-
DC-DC
IC1051 LT3505EMS8E
+6V
IC1071 NJM2885DL1-05
LDO
+5V
V+5AHD,V+5DHD 5V for HDMI Logic,Video Buffer
IC352 NJM2872BF05
LDO
+5V
HDMI OUT2 EXT 5V SUPPLY
IC302 NJM2872BF05
LDO
+5V
HDMI OUT1 EXT 5V SUPPLY SC-LX81 Only
E HDMI NETWORK ASSY

5. DIAGNOSIS

5.1 DIAGNOSIS FLOWCHART

[1] Audio Section Troubleshooting



No Sound Produced

[Distinction the Symptom]
- Does the symptom occur only with a specific function? (HMG, HDMI System, Others)
- Does the same symptom occur with more than one function?

- Perform NETWORK Diagnosis

- Perform HDMI Diagnosis

- Failure around the circuit from input terminal to the switch

[Distinction between analog and digital problem]

① Set the speaker setting to "Large" for all the channels.
② Set the function to "Multi Ch In".
③ Set the listening mode to "Pure Direct".
④ Fix the signal switching to "Analog".

[Distinction between AD line and other digital problem]
- Is the sound produced with the digital input?

# With the signal switching set to "Auto".

[Distinction between preout and power problem]
- Is the pre-out output?

Failure in A/D converter

[Distinction between DIR and other problem]
- Is the input assumed to be digital with the signal switching set to "Auto"? (Is DIR locked in digital?)

Failure in power amplifier
- Perform ICEPOWER Diagnosis

Failure in analog small signal block

[Distinction between DSP and other problem]

① Input the PCM (such as CD) signals.
② Change the listening mode to "Pure Direct (PCM Direct)".
③ Set the signal switching to "Auto" or "PCM".

Failure in DIR

Failure in DSP
- Perform DSP Diagnosis

Failure in D/A converter

[2] DSP Troubleshooting

1) Simplified diagnosis

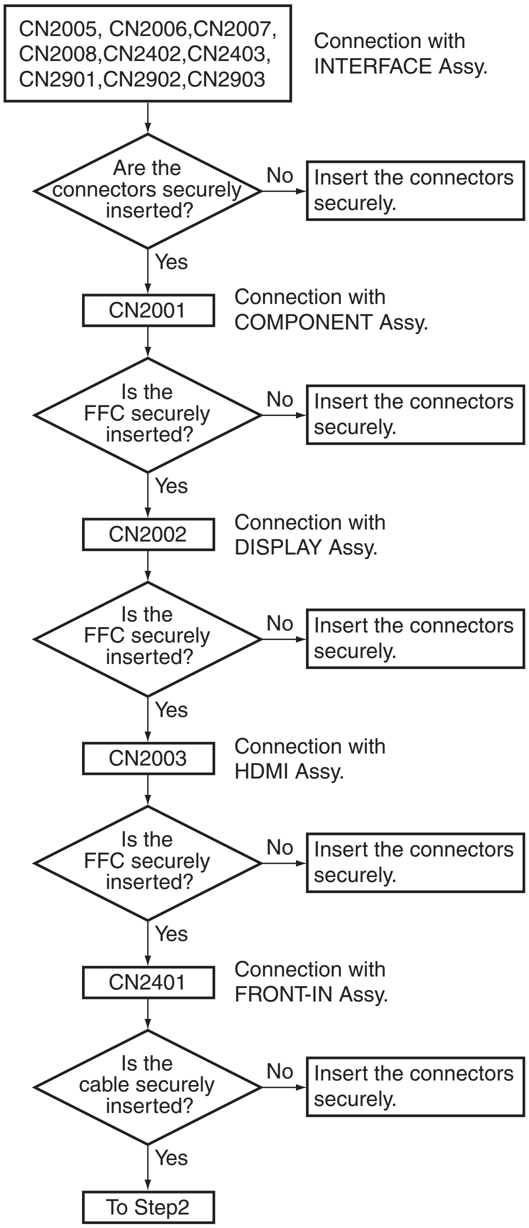
DSP block malfunction is detected.
(The part can be roughly expected just by operation of the main unit.)

- Has DSP block caused the malfunction?
  Inputing a 2ch PCM (such as CD) digital signal, check if the sound plays by switching AUTO SURR / STREAM DIRECT. When the sound doesn't play in AUTO SURROUND or DIRECT MODE though it does in PURE DIRECT (PCM DIRECT) MODE, DSP block might be defective.

2) Troubleshooting

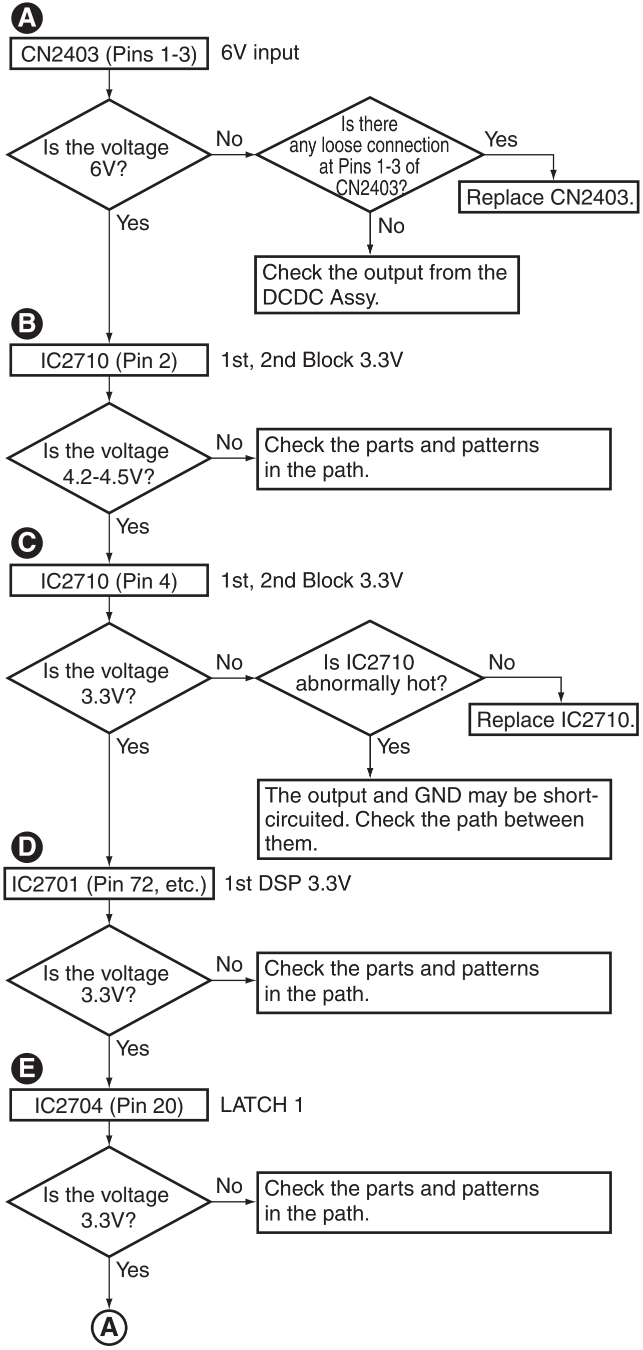
- It is assumed that there is no loose connection or damage in the LCRs.
- Refer to "DIGITAL MOTHER Assy Check Points (DSP Section)" as the parts marked Ⓐ to (AY) in the troubleshooting are located.

Step 1: Connections

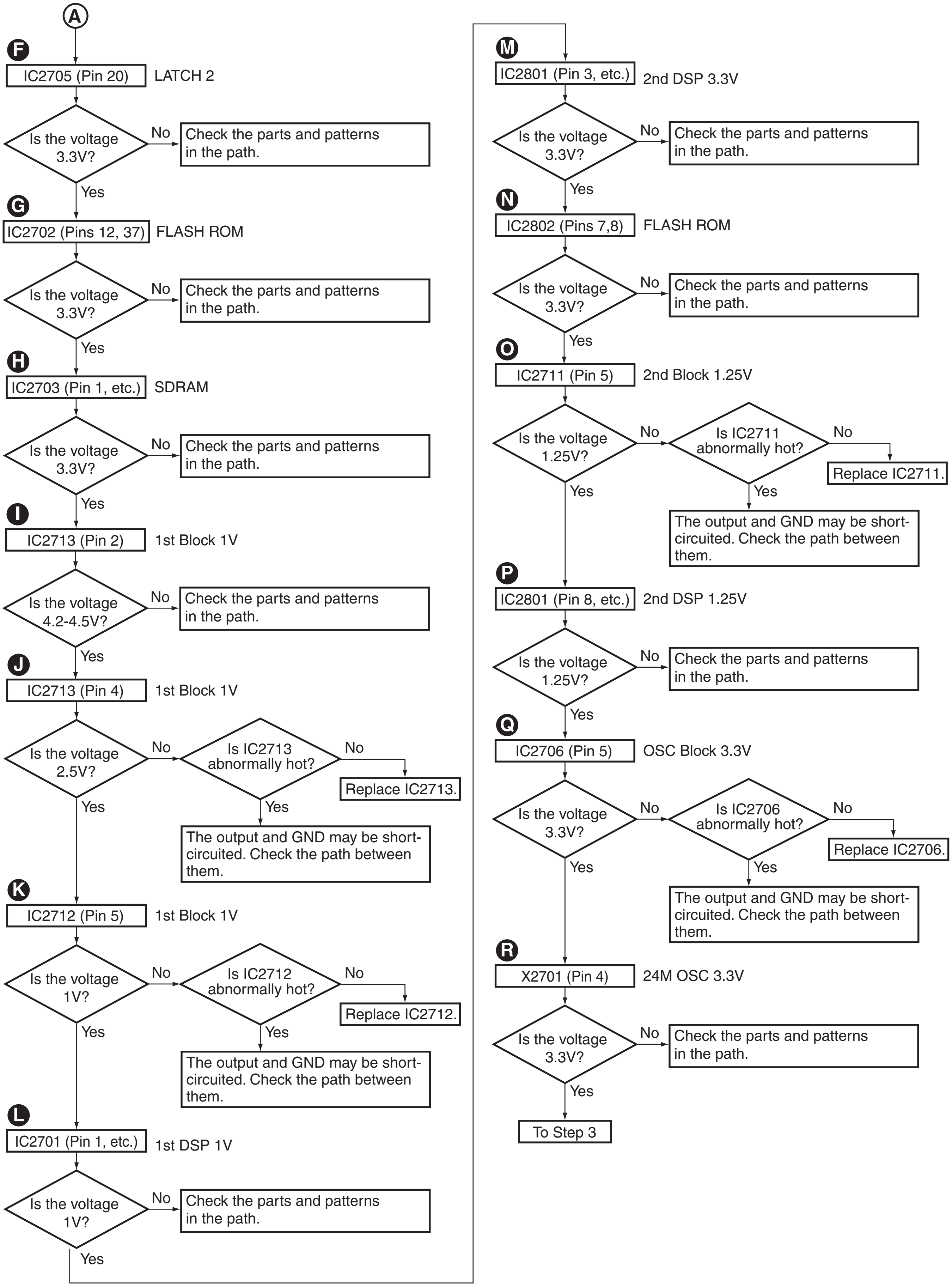


CN2005, CN2006,CN2007, CN2008,CN2402,CN2403, CN2901,CN2902,CN2903
Connection with INTERFACE Assy.
Are the connectors securely inserted?
No
Insert the connectors securely.
Yes
CN2001
Connection with COMPONENT Assy.
Is the FFC securely inserted?
No
Insert the connectors securely.
Yes
CN2002
Connection with DISPLAY Assy.
Is the FFC securely inserted?
No
Insert the connectors securely.
Yes
CN2003
Connection with HDMI Assy.
Is the FFC securely inserted?
No
Insert the connectors securely.
Yes
CN2401
Connection with FRONT-IN Assy.
Is the cable securely inserted?
No
Insert the connectors securely.
Yes
To Step2

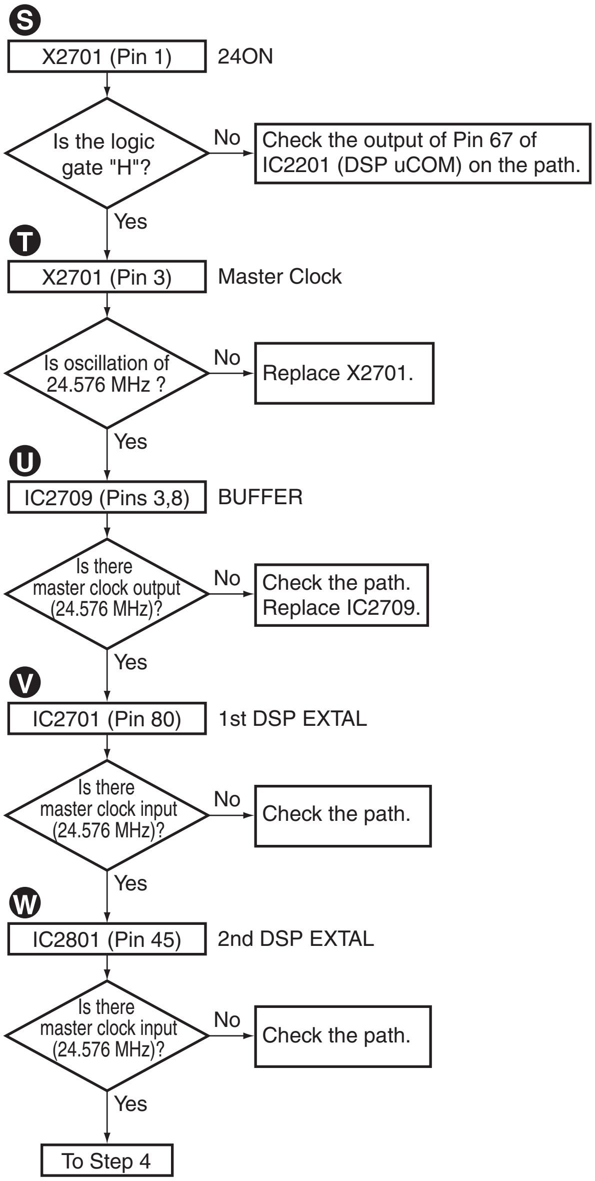
Step 2: Power supply



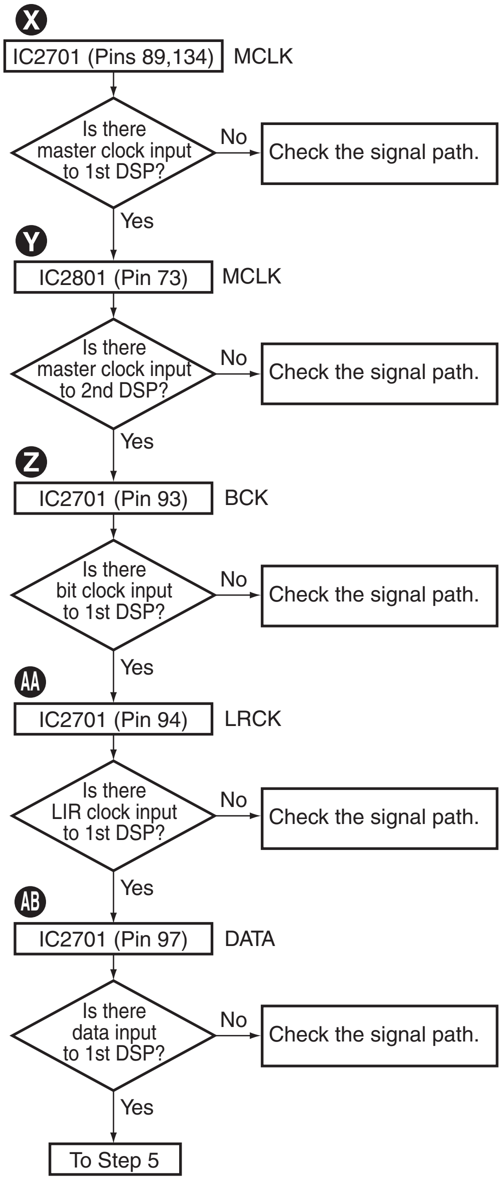
A
CN2403 (Pins 1-3)
6V input
Is the voltage 6V?
No
Is there any loose connection at Pins 1-3 of CN2403?
Yes
Replace CN2403.
No
Check the output from the DCDC Assy.
Yes
B
IC2710 (Pin 2)
1st, 2nd Block 3.3V
Is the voltage 4.2-4.5V?
No
Check the parts and patterns in the path.
Yes
C
IC2710 (Pin 4)
1st, 2nd Block 3.3V
Is the voltage 3.3V?
No
Is IC2710 abnormally hot?
No
Replace IC2710.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
D
IC2701 (Pin 72, etc.)
1st DSP 3.3V
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
E
IC2704 (Pin 20)
LATCH 1
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
A


A
F
IC2705 (Pin 20)
LATCH 2
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
G
IC2702 (Pins 12, 37)
FLASH ROM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
H
IC2703 (Pin 1, etc.)
SDRAM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
I
IC2713 (Pin 2)
1st Block 1V
Is the voltage 4.2-4.5V?
No
Check the parts and patterns in the path.
Yes
J
IC2713 (Pin 4)
1st Block 1V
Is the voltage 2.5V?
No
Is IC2713 abnormally hot?
No
Replace IC2713.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
K
IC2712 (Pin 5)
1st Block 1V
Is the voltage 1V?
No
Is IC2712 abnormally hot?
No
Replace IC2712.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
L
IC2701 (Pin 1, etc.)
1st DSP 1V
Is the voltage 1V?
No
Check the parts and patterns in the path.
Yes
M
IC2801 (Pin 3, etc.)
2nd DSP 3.3V
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
N
IC2802 (Pins 7,8)
FLASH ROM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
O
IC2711 (Pin 5)
2nd Block 1.25V
Is the voltage 1.25V?
No
Is IC2711 abnormally hot?
No
Replace IC2711.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
P
IC2801 (Pin 8, etc.)
2nd DSP 1.25V
Is the voltage 1.25V?
No
Check the parts and patterns in the path.
Yes
Q
IC2706 (Pin 5)
OSC Block 3.3V
Is the voltage 3.3V?
No
Is IC2706 abnormally hot?
No
Replace IC2706.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
R
X2701 (Pin 4)
24M OSC 3.3V
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
To Step 3

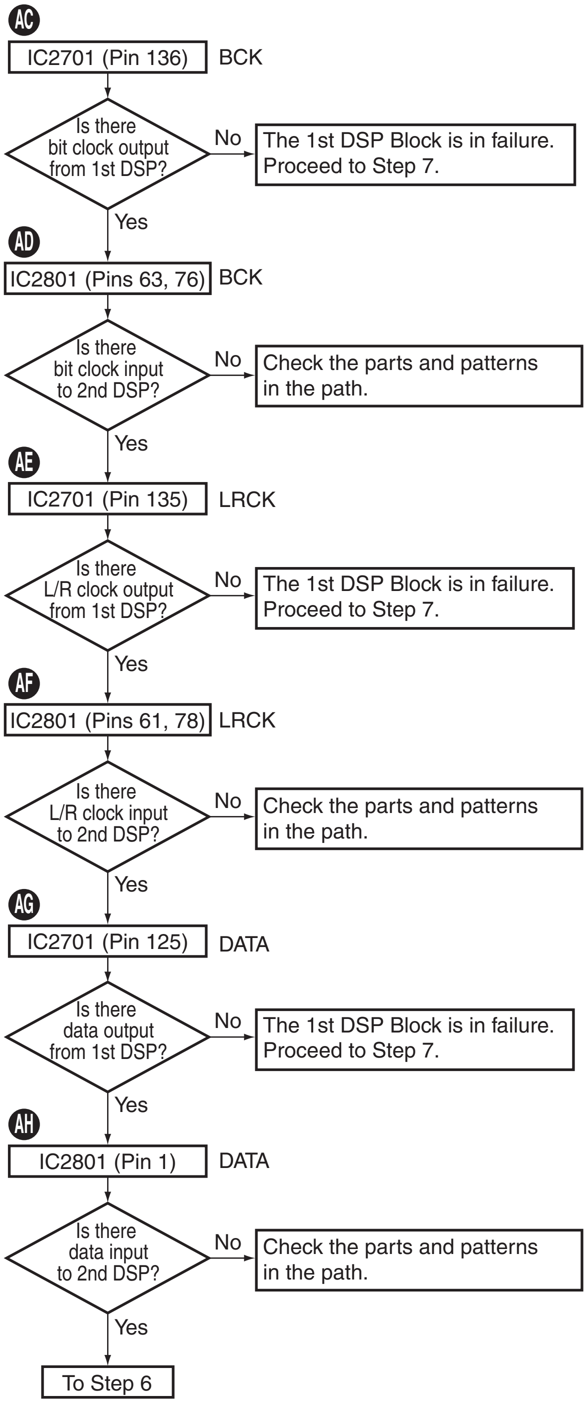
Step 3: Master Clock


S
X2701 (Pin 1)
24ON
Is the logic gate "H"?
No
Check the output of Pin 67 of IC2201 (DSP uCOM) on the path.
Yes
T
X2701 (Pin 3)
Master Clock
Is oscillation of 24.576 MHz ?
No
Replace X2701.
Yes
U
IC2709 (Pins 3,8)
BUFFER
Is there master clock output (24.576 MHz)?
No
Check the path.
Replace IC2709.
Yes
V
IC2701 (Pin 80)
1st DSP EXTAL
Is there master clock input (24.576 MHz)?
No
Check the path.
Yes
W
IC2801 (Pin 45)
2nd DSP EXTAL
Is there master clock input (24.576 MHz)?
No
Check the path.
Yes
To Step 4

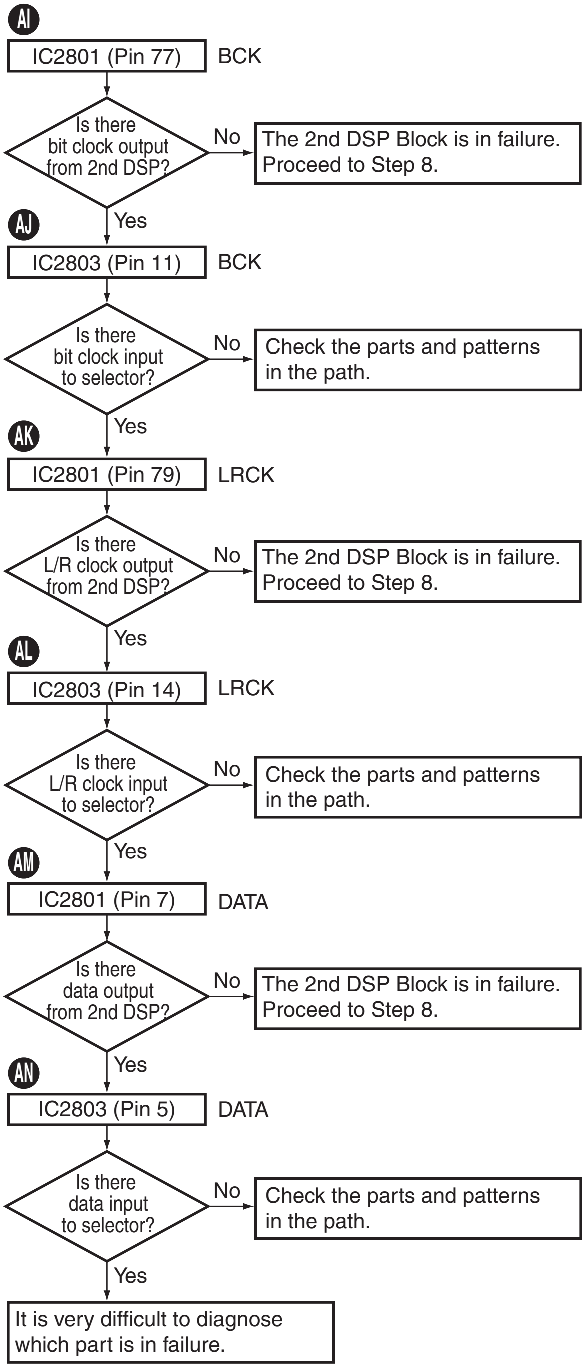
Step 4: Audio Signal


X
IC2701 (Pins 89,134)
MCLK
Is there master clock input to 1st DSP?
No
Check the signal path.
Yes
Y
IC2801 (Pin 73)
MCLK
Is there master clock input to 2nd DSP?
No
Check the signal path.
Yes
Z
IC2701 (Pin 93)
BCK
Is there bit clock input to 1st DSP?
No
Check the signal path.
Yes
AA
IC2701 (Pin 94)
LRCK
Is there LIR clock input to 1st DSP?
No
Check the signal path.
Yes
AB
IC2701 (Pin 97)
DATA
Is there data input to 1st DSP?
No
Check the signal path.
Yes
To Step 5

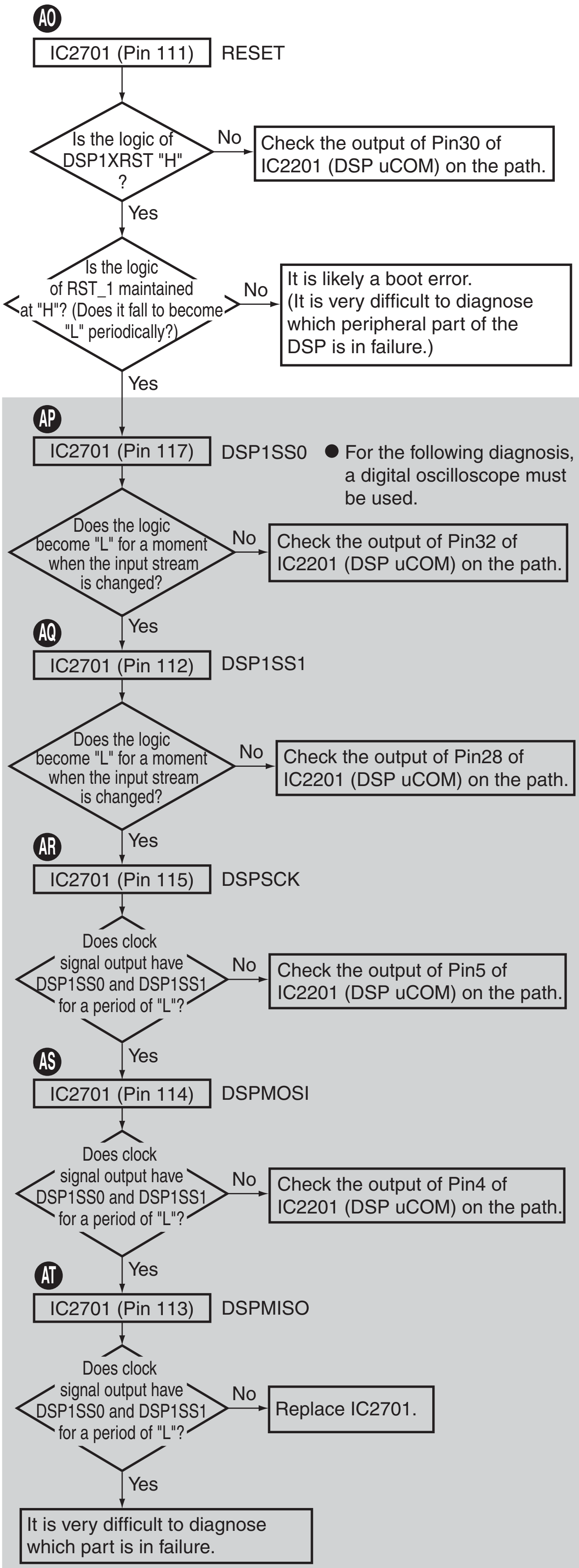
Step 5: Audio Signal


AC
IC2701 (Pin 136)
BCK
Is there bit clock output from 1st DSP?
No
The 1st DSP Block is in failure. Proceed to Step 7.
Yes
AD
IC2801 (Pins 63, 76)
BCK
Is there bit clock input to 2nd DSP?
No
Check the parts and patterns in the path.
Yes
AE
IC2701 (Pin 135)
LRCK
Is there L/R clock output from 1st DSP?
No
The 1st DSP Block is in failure. Proceed to Step 7.
Yes
AF
IC2801 (Pins 61, 78)
LRCK
Is there L/R clock input to 2nd DSP?
No
Check the parts and patterns in the path.
Yes
AG
IC2701 (Pin 125)
DATA
Is there data output from 1st DSP?
No
The 1st DSP Block is in failure. Proceed to Step 7.
Yes
AH
IC2801 (Pin 1)
DATA
Is there data input to 2nd DSP?
No
Check the parts and patterns in the path.
Yes
To Step 6

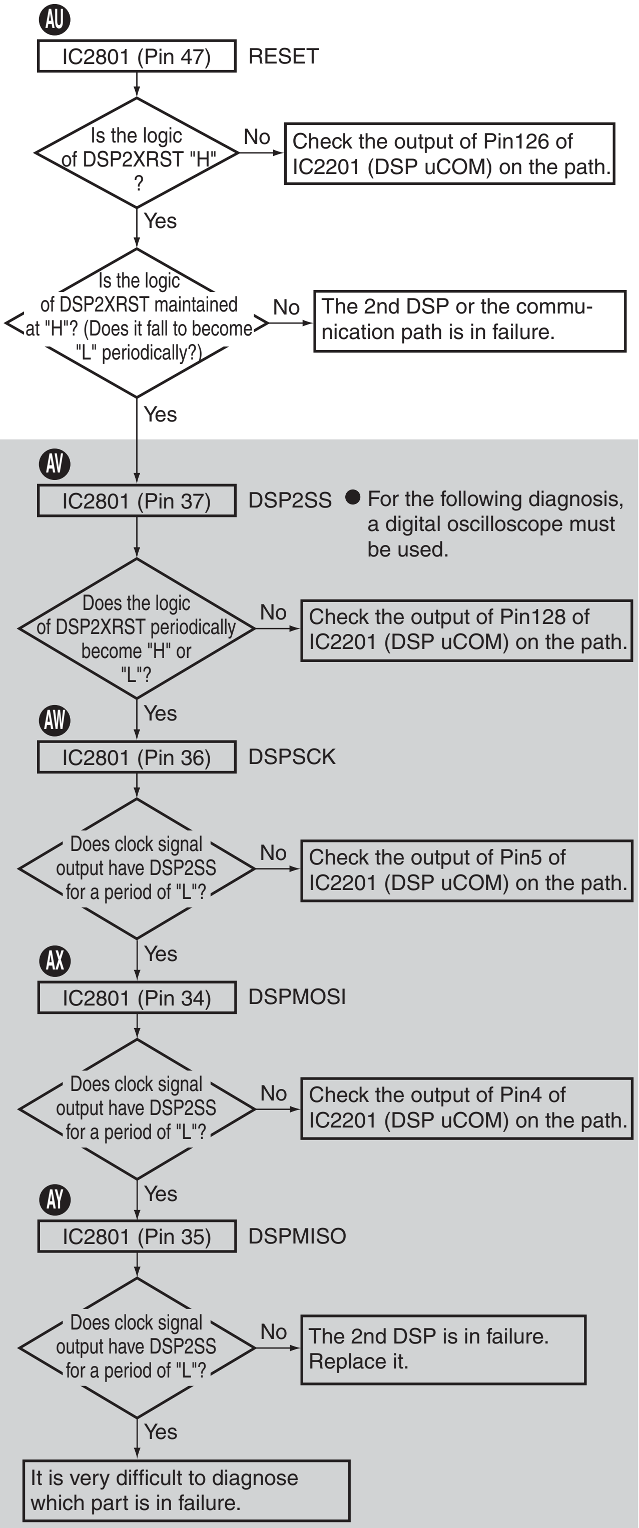
Step 6: Audio Signal


AI
IC2801 (Pin 77)
BCK
Is there bit clock output from 2nd DSP?
No
The 2nd DSP Block is in failure. Proceed to Step 8.
Yes
AJ
IC2803 (Pin 11)
BCK
Is there bit clock input to selector?
No
Check the parts and patterns in the path.
Yes
AK
IC2801 (Pin 79)
LRCK
Is there L/R clock output from 2nd DSP?
No
The 2nd DSP Block is in failure. Proceed to Step 8.
Yes
AL
IC2803 (Pin 14)
LRCK
Is there L/R clock input to selector?
No
Check the parts and patterns in the path.
Yes
AM
IC2801 (Pin 7)
DATA
Is there data output from 2nd DSP?
No
The 2nd DSP Block is in failure. Proceed to Step 8.
Yes
AN
IC2803 (Pin 5)
DATA
Is there data input to selector?
No
Check the parts and patterns in the path.
Yes
It is very difficult to diagnose which part is in failure.

Step 7: 1st DSP

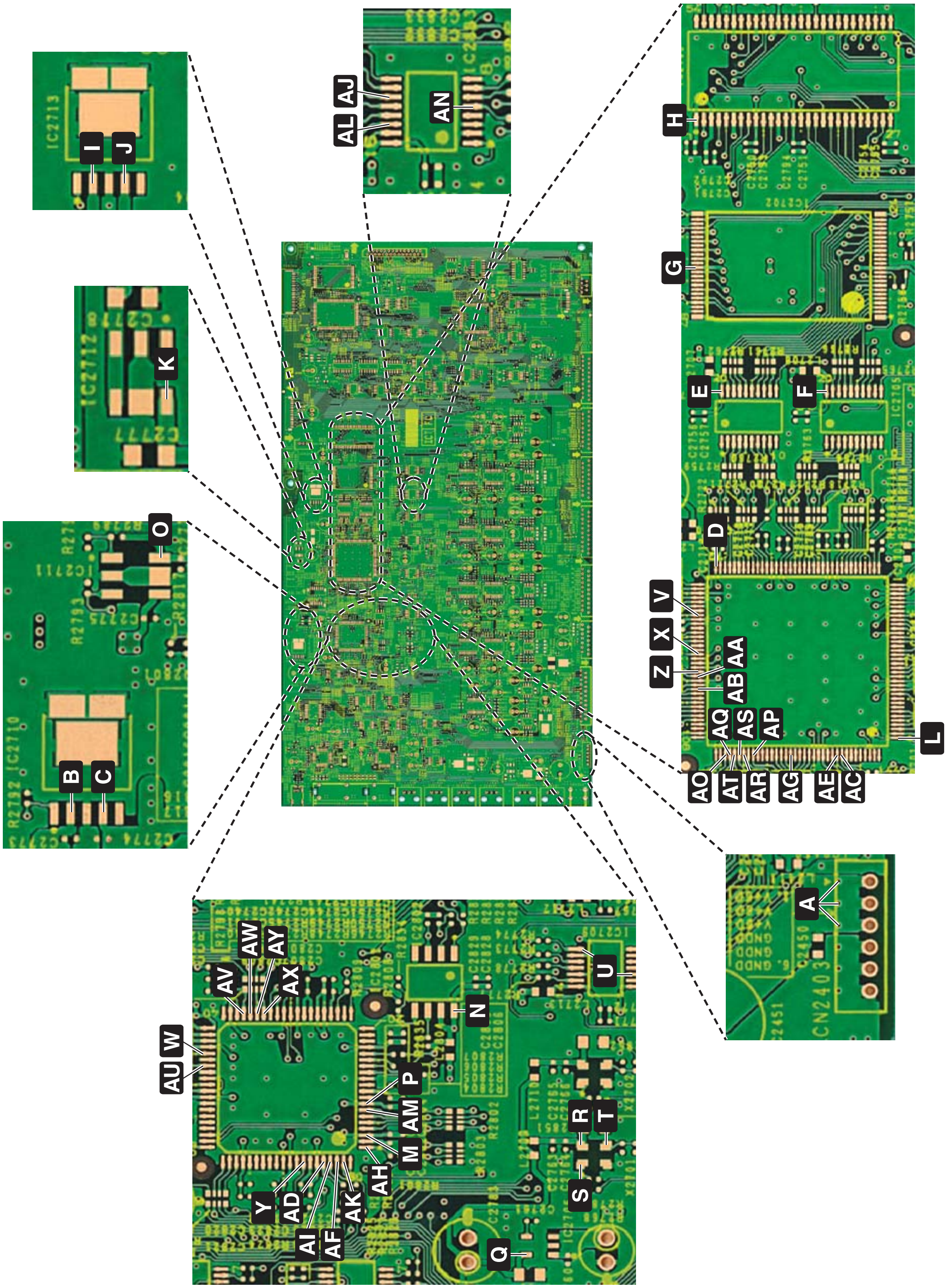

AO
IC2701 (Pin 111)
RESET
Is the logic of DSP1XRST "H" ?
No
Check the output of Pin30 of IC2201 (DSP uCOM) on the path.
Yes
Is the logic of RST_1 maintained at "H"? (Does it fall to become "L" periodically?)
No
It is likely a boot error. (It is very difficult to diagnose which peripheral part of the DSP is in failure.)
Yes
AP
IC2701 (Pin 117)
DSP1SS0
● For the following diagnosis, a digital oscilloscope must be used.
Does the logic become "L" for a moment when the input stream is changed?
No
Check the output of Pin32 of IC2201 (DSP uCOM) on the path.
Yes
AQ
IC2701 (Pin 112)
DSP1SS1
Does the logic become "L" for a moment when the input stream is changed?
No
Check the output of Pin28 of IC2201 (DSP uCOM) on the path.
Yes
AR
IC2701 (Pin 115)
DSPSCK
Does clock signal output have DSP1SS0 and DSP1SS1 for a period of "L"?
No
Check the output of Pin5 of IC2201 (DSP uCOM) on the path.
Yes
AS
IC2701 (Pin 114)
DSPMOSI
Does clock signal output have DSP1SS0 and DSP1SS1 for a period of "L"?
No
Check the output of Pin4 of IC2201 (DSP uCOM) on the path.
Yes
AT
IC2701 (Pin 113)
DSPMISO
Does clock signal output have DSP1SS0 and DSP1SS1 for a period of "L"?
No
Replace IC2701.
Yes
It is very difficult to diagnose which part is in failure.

Step 8: 2nd DSP


AU
IC2801 (Pin 47)
RESET
Is the logic of DSP2XRST "H" ?
No
Check the output of Pin126 of IC2201 (DSP uCOM) on the path.
Yes
Is the logic of DSP2XRST maintained at "H"? (Does it fall to become "L" periodically?)
No
The 2nd DSP or the communication path is in failure.
Yes
AV
IC2801 (Pin 37)
DSP2SS
● For the following diagnosis, a digital oscilloscope must be used.
Does the logic of DSP2XRST periodically become "H" or "L"?
No
Check the output of Pin128 of IC2201 (DSP uCOM) on the path.
Yes
AW
IC2801 (Pin 36)
DSPSCK
Does clock signal output have DSP2SS for a period of "L"?
No
Check the output of Pin5 of IC2201 (DSP uCOM) on the path.
Yes
AX
IC2801 (Pin 34)
DSPMOSI
Does clock signal output have DSP2SS for a period of "L"?
No
Check the output of Pin4 of IC2201 (DSP uCOM) on the path.
Yes
AY
IC2801 (Pin 35)
DSPMISO
Does clock signal output have DSP2SS for a period of "L"?
No
The 2nd DSP is in failure. Replace it.
Yes
It is very difficult to diagnose which part is in failure.

3) D-MOTHER Assy check points (DSP section)

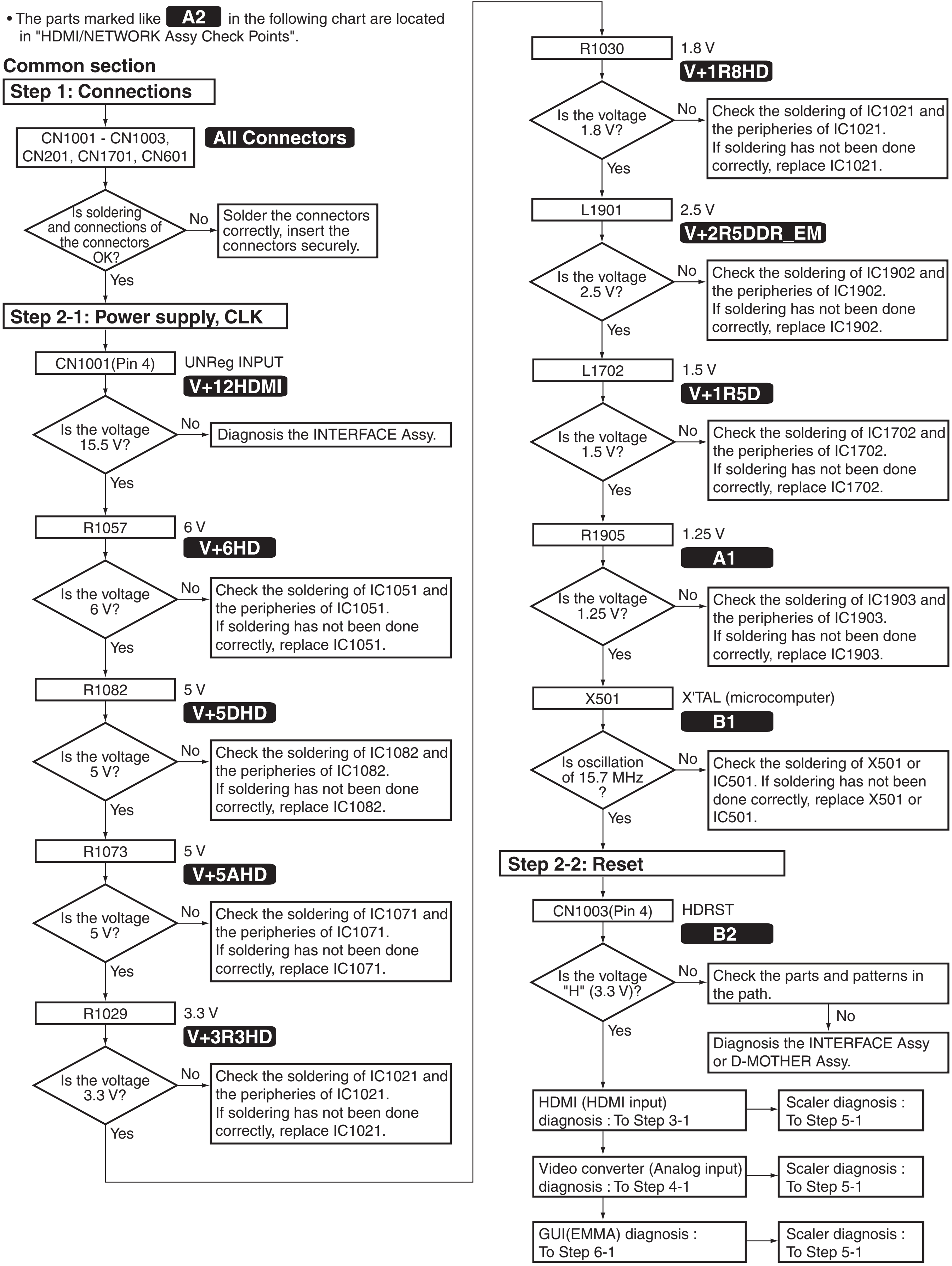
B D-MOTHER ASSY SIDE A


I
J
AJ
AL
AN
H
G
K
E
F
O
D
V
X
Z
AA
AB
AQ
AS
AP
L
AO
AT
AR
AG
AE
AC
B
C
A
AW
AY
AV
AX
U
N
W
AU
P
AM
M
AH
R
T
S
Y
AD
AK
AI
AF
Q

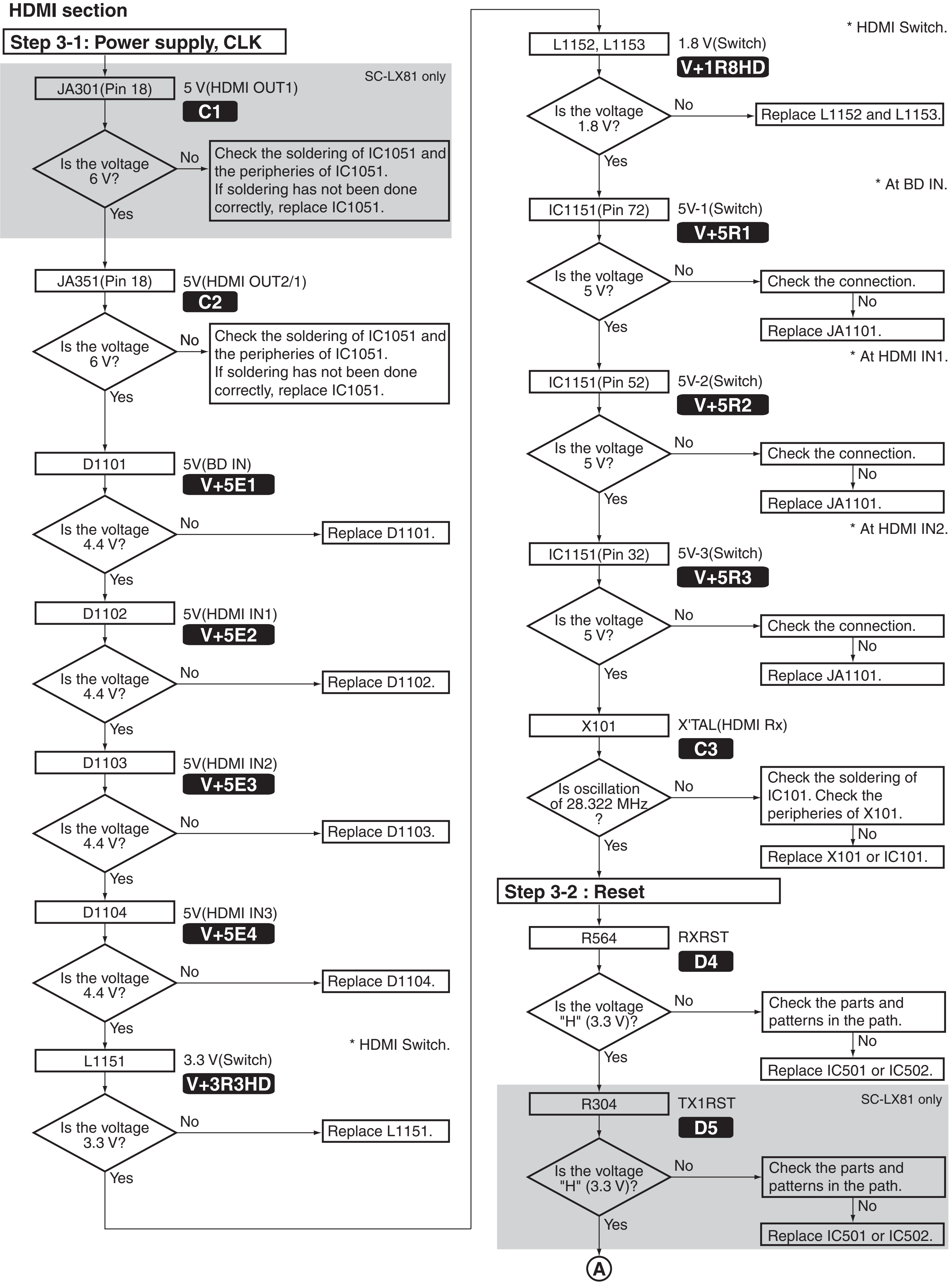
[3] HDMI Troubleshooting

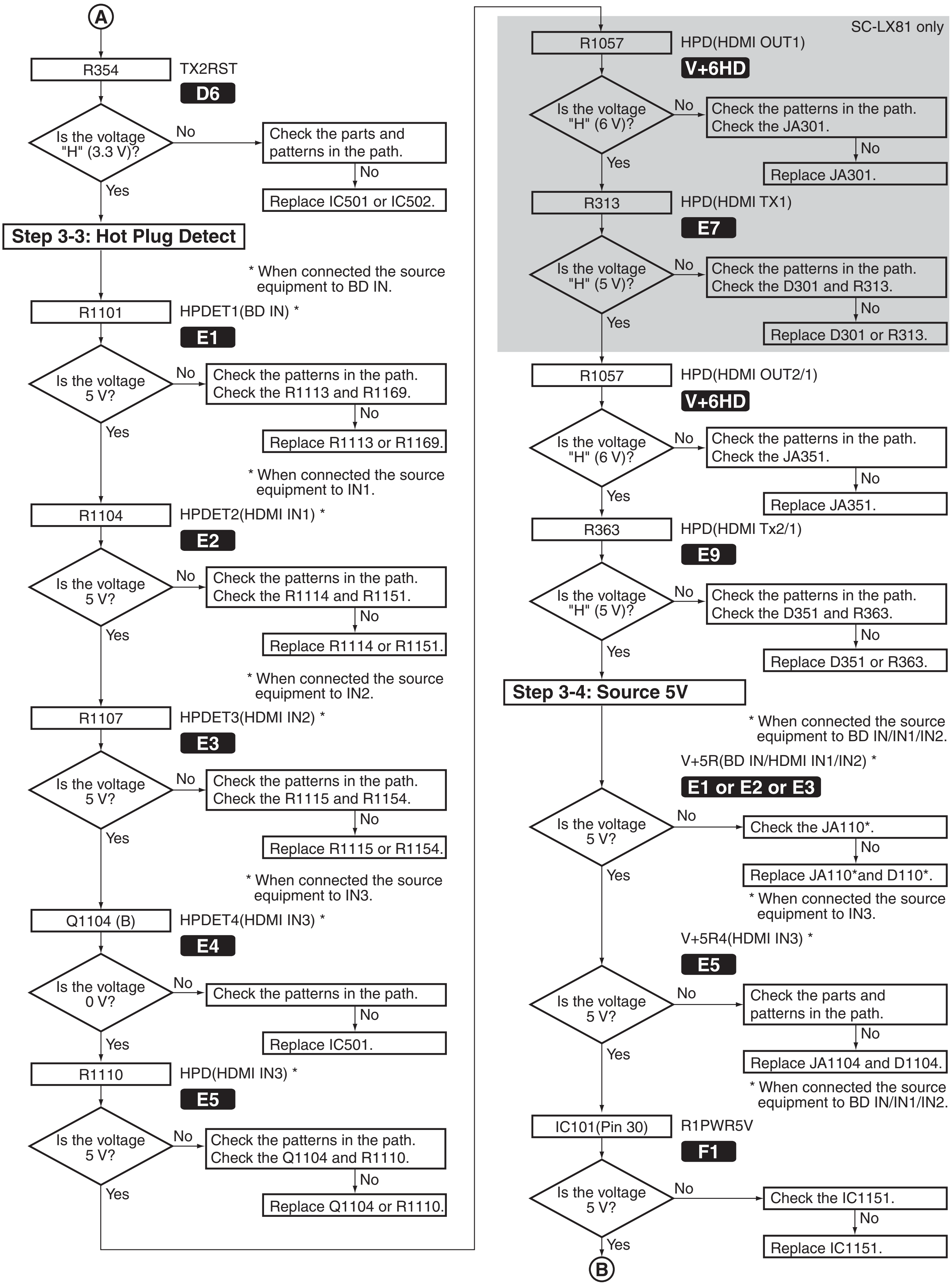
- The parts marked like **A2** in the following chart are located in "HDMI/NETWORK Assy Check Points".

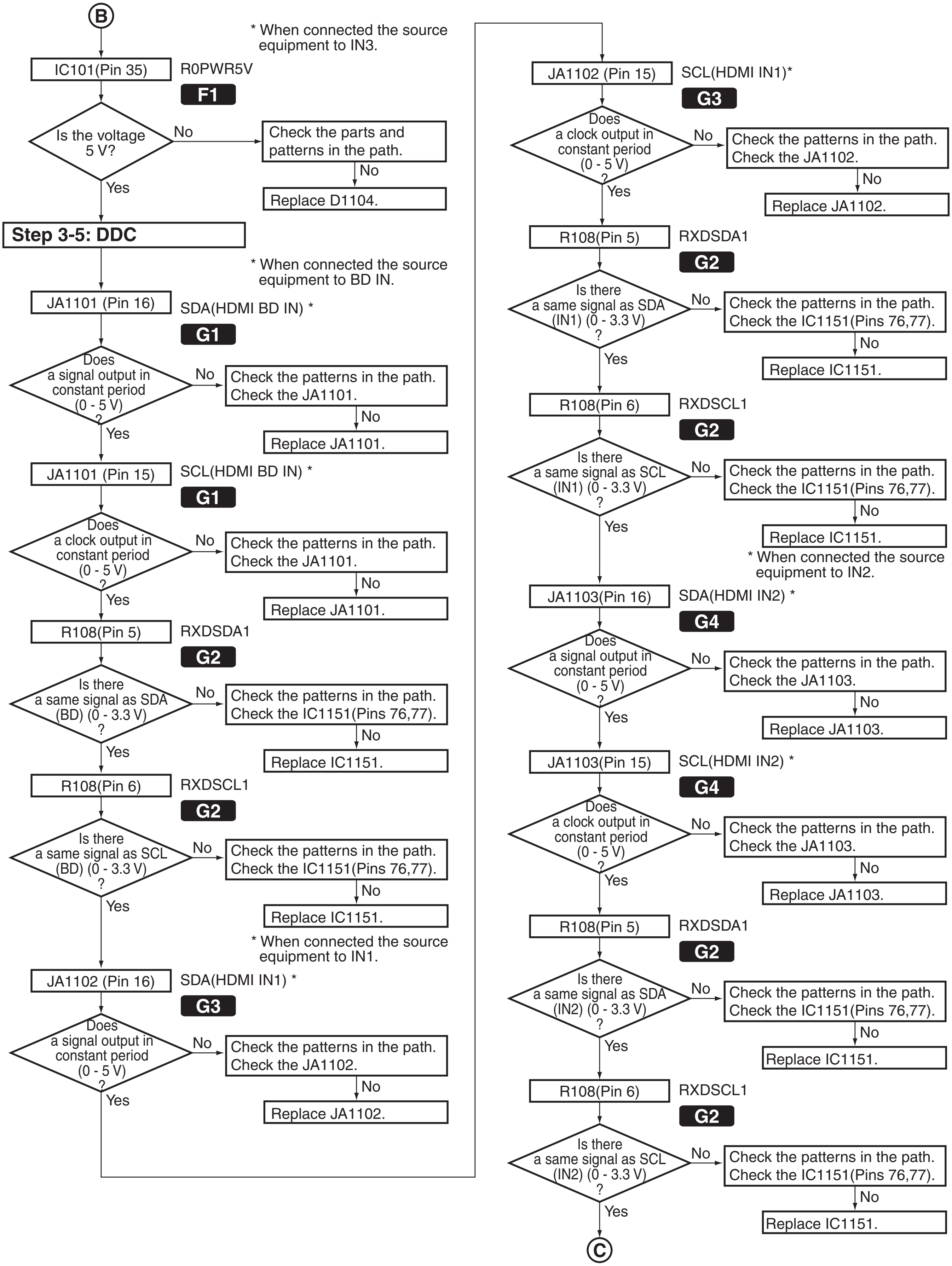
Common section

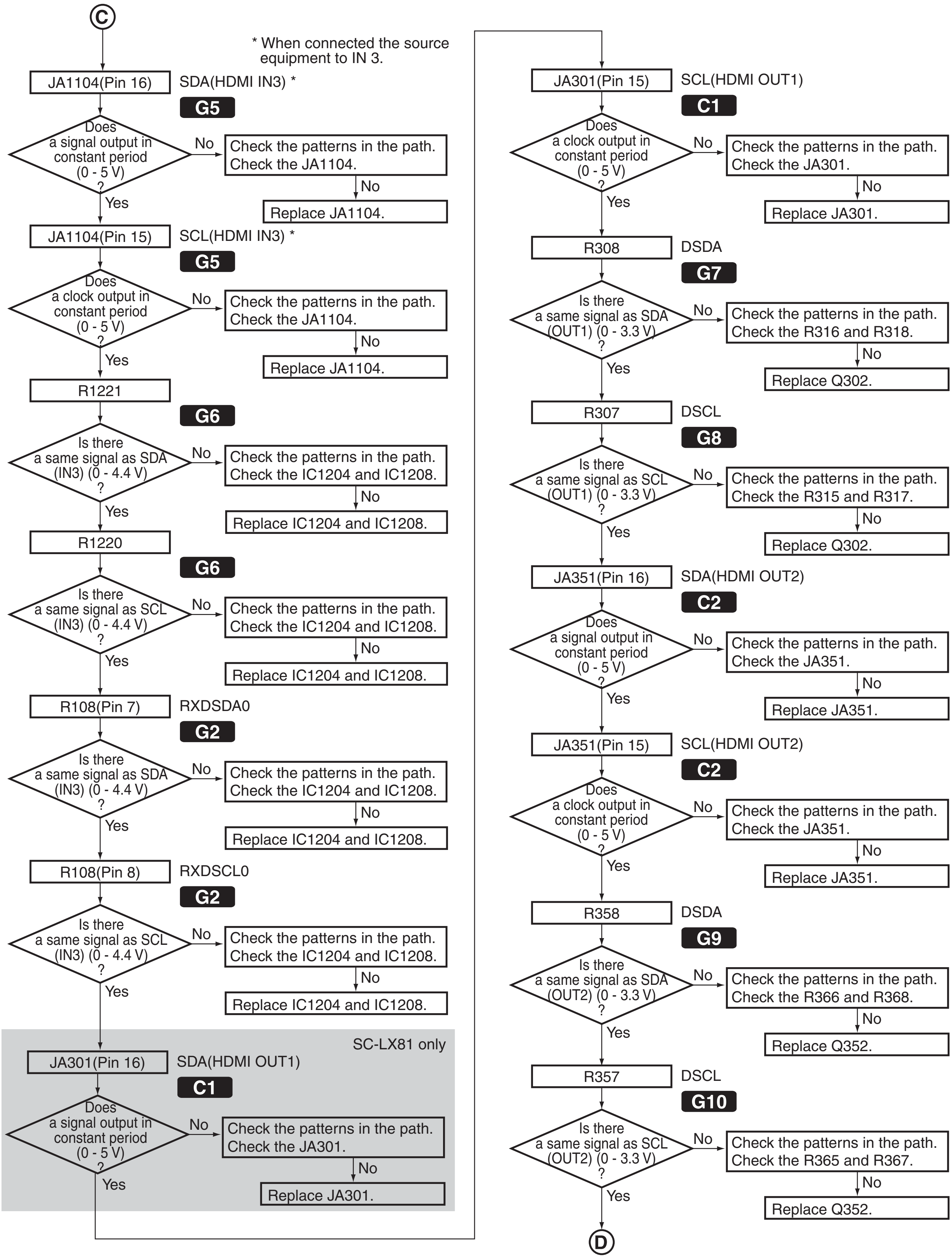

Step 1: Connections
CN1001 - CN1003, CN201, CN1701, CN601
All Connectors
Is soldering and connections of the connectors OK?
No
Solder the connectors correctly, insert the connectors securely.
Yes
Step 2-1: Power supply, CLK
CN1001(Pin 4)
UNReg INPUT
V+12HDMI
Is the voltage 15.5 V?
No
Diagnosis the INTERFACE Assy.
Yes
R1057
6 V
V+6HD
Is the voltage 6 V?
No
Check the soldering of IC1051 and the peripheries of IC1051. If soldering has not been done correctly, replace IC1051.
Yes
R1082
5 V
V+5DHD
Is the voltage 5 V?
No
Check the soldering of IC1082 and the peripheries of IC1082. If soldering has not been done correctly, replace IC1082.
Yes
R1073
5 V
V+5AHD
Is the voltage 5 V?
No
Check the soldering of IC1071 and the peripheries of IC1071. If soldering has not been done correctly, replace IC1071.
Yes
R1029
3.3 V
V+3R3HD
Is the voltage 3.3 V?
No
Check the soldering of IC1021 and the peripheries of IC1021. If soldering has not been done correctly, replace IC1021.
Yes
R1030
1.8 V
V+1R8HD
Is the voltage 1.8 V?
No
Check the soldering of IC1021 and the peripheries of IC1021. If soldering has not been done correctly, replace IC1021.
Yes
L1901
2.5 V
V+2R5DDR_EM
Is the voltage 2.5 V?
No
Check the soldering of IC1902 and the peripheries of IC1902. If soldering has not been done correctly, replace IC1902.
Yes
L1702
1.5 V
V+1R5D
Is the voltage 1.5 V?
No
Check the soldering of IC1702 and the peripheries of IC1702. If soldering has not been done correctly, replace IC1702.
Yes
R1905
1.25 V
A1
Is the voltage 1.25 V?
No
Check the soldering of IC1903 and the peripheries of IC1903. If soldering has not been done correctly, replace IC1903.
Yes
X501
X'TAL (microcomputer)
B1
Is oscillation of 15.7 MHz ?
No
Check the soldering of X501 or IC501. If soldering has not been done correctly, replace X501 or IC501.
Yes
Step 2-2: Reset
CN1003(Pin 4)
HDRST
B2
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Diagnosis the INTERFACE Assy or D-MOTHER Assy.
Yes
HDMI (HDMI input) diagnosis : To Step 3-1
Scaler diagnosis : To Step 5-1
Video converter (Analog input) diagnosis : To Step 4-1
Scaler diagnosis : To Step 5-1
GUI(EMMA) diagnosis : To Step 6-1
Scaler diagnosis : To Step 5-1

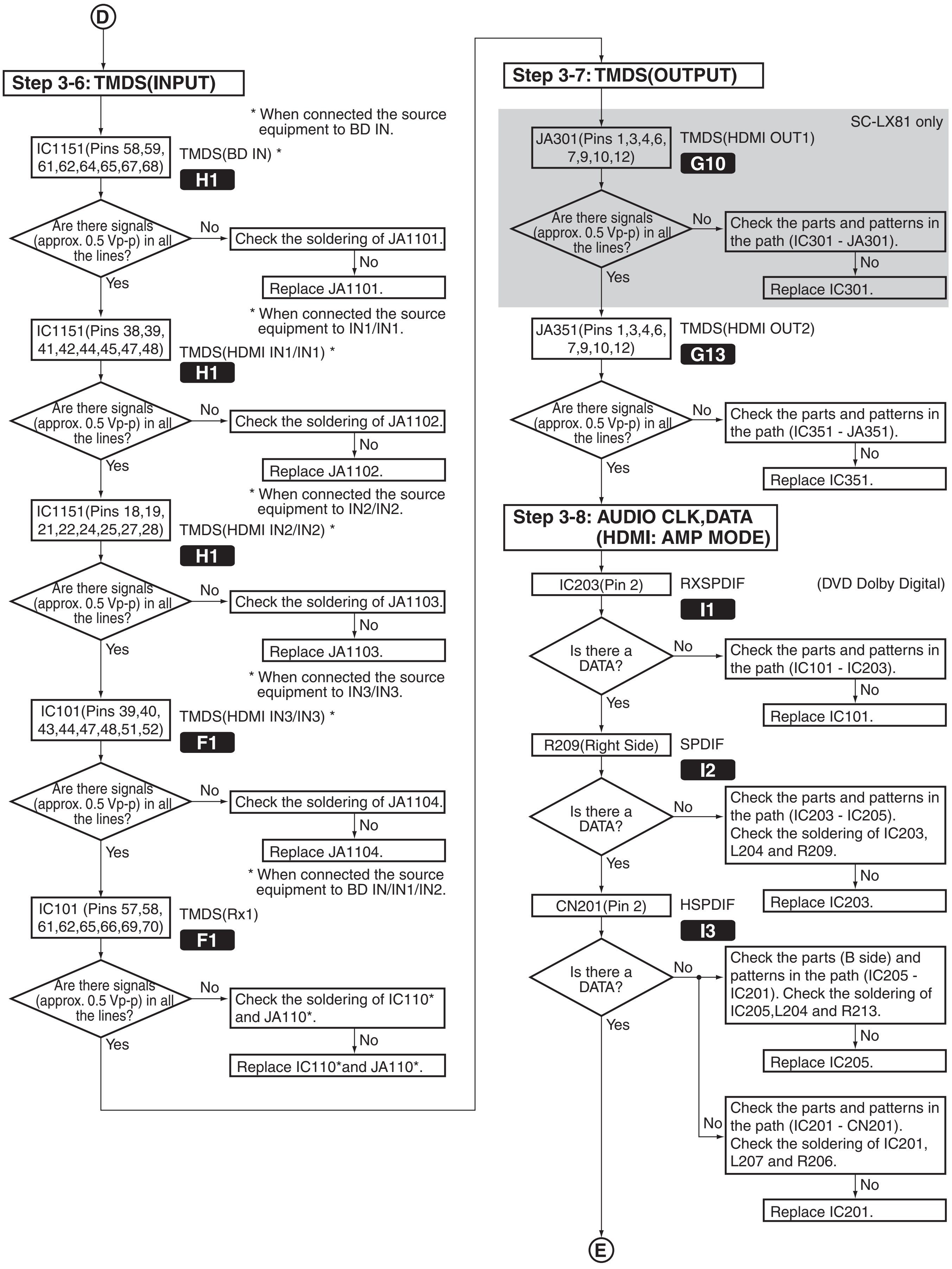
HDMI section

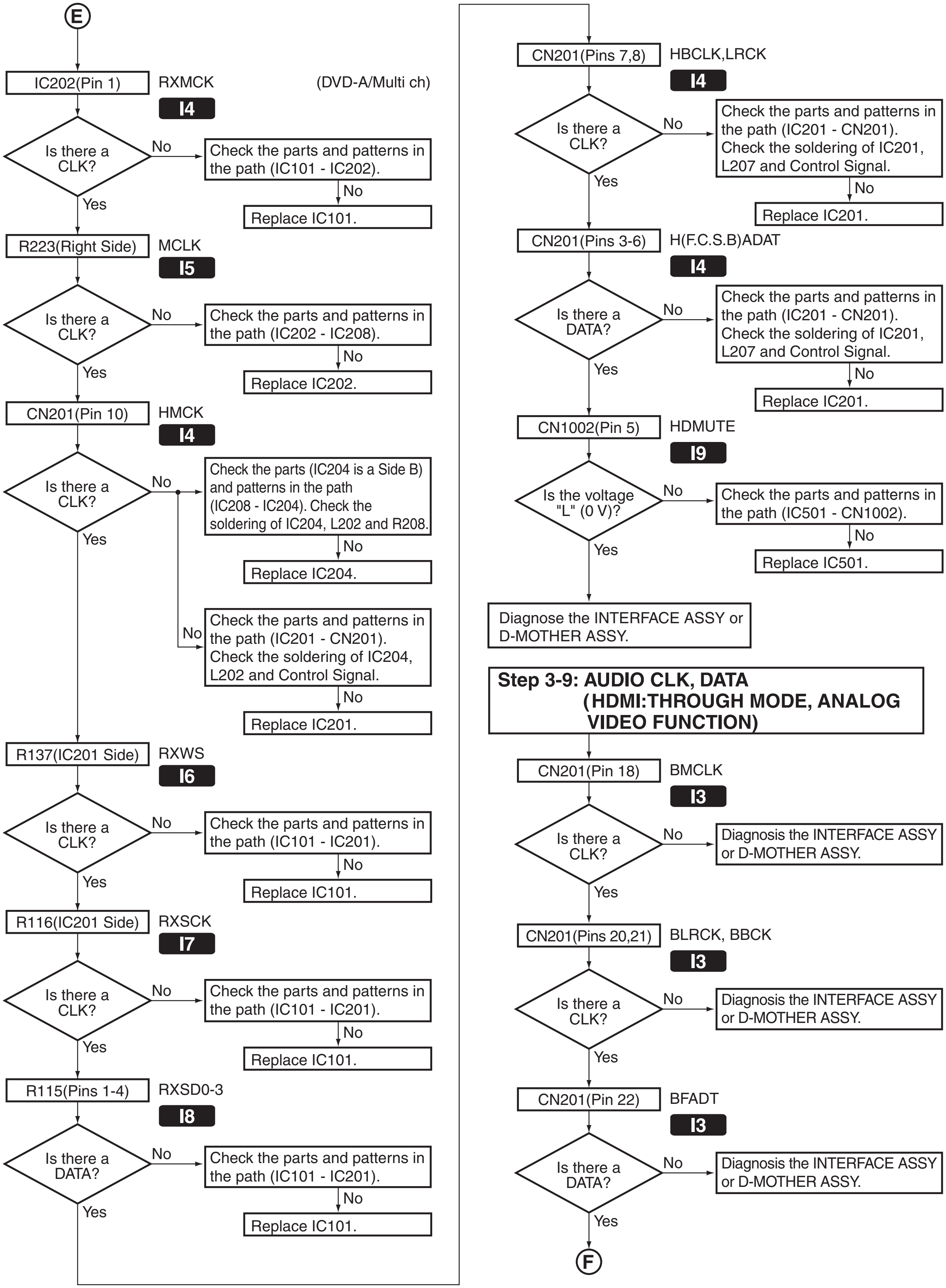

Step 3-1: Power supply, CLK
SC-LX81 only
JA301(Pin 18)
5 V(HDMI OUT1)
C1
Is the voltage 6 V?
No
Check the soldering of IC1051 and the peripheries of IC1051. If soldering has not been done correctly, replace IC1051.
Yes
JA351(Pin 18)
5V(HDMI OUT2/1)
C2
Is the voltage 6 V?
No
Check the soldering of IC1051 and the peripheries of IC1051. If soldering has not been done correctly, replace IC1051.
Yes
D1101
5V(BD IN)
V+5E1
Is the voltage 4.4 V?
No
Replace D1101.
Yes
D1102
5V(HDMI IN1)
V+5E2
Is the voltage 4.4 V?
No
Replace D1102.
Yes
D1103
5V(HDMI IN2)
V+5E3
Is the voltage 4.4 V?
No
Replace D1103.
Yes
D1104
5V(HDMI IN3)
V+5E4
Is the voltage 4.4 V?
No
Replace D1104.
Yes
* HDMI Switch.
L1151
3.3 V(Switch)
V+3R3HD
Is the voltage 3.3 V?
No
Replace L1151.
Yes
* HDMI Switch.
L1152, L1153
1.8 V(Switch)
V+1R8HD
Is the voltage 1.8 V?
No
Replace L1152 and L1153.
Yes
* At BD IN.
IC1151(Pin 72)
5V-1(Switch)
V+5R1
Is the voltage 5 V?
No
Check the connection.
No
Replace JA1101.
Yes
* At HDMI IN1.
IC1151(Pin 52)
5V-2(Switch)
V+5R2
Is the voltage 5 V?
No
Check the connection.
No
Replace JA1101.
Yes
* At HDMI IN2.
IC1151(Pin 32)
5V-3(Switch)
V+5R3
Is the voltage 5 V?
No
Check the connection.
No
Replace JA1101.
Yes
X101
X'TAL(HDMI Rx)
C3
Is oscillation of 28.322 MHz ?
No
Check the soldering of IC101. Check the peripheries of X101.
No
Replace X101 or IC101.
Yes
Step 3-2 : Reset
R564
RXRST
D4
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Replace IC501 or IC502.
Yes
SC-LX81 only
R304
TX1RST
D5
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Replace IC501 or IC502.
Yes
A


A
R354
TX2RST
D6
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Replace IC501 or IC502.
Yes
Step 3-3: Hot Plug Detect
* When connected the source equipment to BD IN.
R1101
HPDET1(BD IN) *
E1
Is the voltage 5 V?
No
Check the patterns in the path. Check the R1113 and R1169.
No
Replace R1113 or R1169.
Yes
* When connected the source equipment to IN1.
R1104
HPDET2(HDMI IN1) *
E2
Is the voltage 5 V?
No
Check the patterns in the path. Check the R1114 and R1151.
No
Replace R1114 or R1151.
Yes
* When connected the source equipment to IN2.
R1107
HPDET3(HDMI IN2) *
E3
Is the voltage 5 V?
No
Check the patterns in the path. Check the R1115 and R1154.
No
Replace R1115 or R1154.
Yes
* When connected the source equipment to IN3.
Q1104 (B)
HPDET4(HDMI IN3) *
E4
Is the voltage 0 V?
No
Check the patterns in the path.
No
Replace IC501.
Yes
R1110
HPD(HDMI IN3) *
E5
Is the voltage 5 V?
No
Check the patterns in the path. Check the Q1104 and R1110.
No
Replace Q1104 or R1110.
Yes
SC-LX81 only
R1057
HPD(HDMI OUT1)
V+6HD
Is the voltage "H" (6 V)?
No
Check the patterns in the path. Check the JA301.
No
Replace JA301.
Yes
R313
HPD(HDMI TX1)
E7
Is the voltage "H" (5 V)?
No
Check the patterns in the path. Check the D301 and R313.
No
Replace D301 or R313.
Yes
R1057
HPD(HDMI OUT2/1)
V+6HD
Is the voltage "H" (6 V)?
No
Check the patterns in the path. Check the JA351.
No
Replace JA351.
Yes
R363
HPD(HDMI Tx2/1)
E9
Is the voltage "H" (5 V)?
No
Check the patterns in the path. Check the D351 and R363.
No
Replace D351 or R363.
Yes
Step 3-4: Source 5V
* When connected the source equipment to BD IN/IN1/IN2.
V+5R(BD IN/HDMI IN1/IN2) *
E1 or E2 or E3
Is the voltage 5 V?
No
Check the JA110*.
No
Replace JA110*and D110*.
Yes
* When connected the source equipment to IN3.
V+5R4(HDMI IN3) *
E5
Is the voltage 5 V?
No
Check the parts and patterns in the path.
No
Replace JA1104 and D1104.
Yes
* When connected the source equipment to BD IN/IN1/IN2.
IC101(Pin 30)
R1PWR5V
F1
Is the voltage 5 V?
No
Check the IC1151.
No
Replace IC1151.
Yes
B


B
* When connected the source equipment to IN3.
IC101(Pin 35)
R0PWR5V
F1
Is the voltage 5 V?
No
Check the parts and patterns in the path.
No
Replace D1104.
Yes
Step 3-5: DDC
* When connected the source equipment to BD IN.
JA1101 (Pin 16)
SDA(HDMI BD IN) *
G1
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1101.
No
Replace JA1101.
Yes
JA1101 (Pin 15)
SCL(HDMI BD IN) *
G1
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1101.
No
Replace JA1101.
Yes
R108(Pin 5)
RXDSDA1
G2
Is there a same signal as SDA (BD) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
R108(Pin 6)
RXDSCL1
G2
Is there a same signal as SCL (BD) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
* When connected the source equipment to IN1.
JA1102 (Pin 16)
SDA(HDMI IN1) *
G3
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1102.
No
Replace JA1102.
Yes
JA1102 (Pin 15)
SCL(HDMI IN1)*
G3
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1102.
No
Replace JA1102.
Yes
R108(Pin 5)
RXDSDA1
G2
Is there a same signal as SDA (IN1) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
R108(Pin 6)
RXDSCL1
G2
Is there a same signal as SCL (IN1) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
* When connected the source equipment to IN2.
JA1103(Pin 16)
SDA(HDMI IN2) *
G4
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1103.
No
Replace JA1103.
Yes
JA1103(Pin 15)
SCL(HDMI IN2) *
G4
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1103.
No
Replace JA1103.
Yes
R108(Pin 5)
RXDSDA1
G2
Is there a same signal as SDA (IN2) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
R108(Pin 6)
RXDSCL1
G2
Is there a same signal as SCL (IN2) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
C

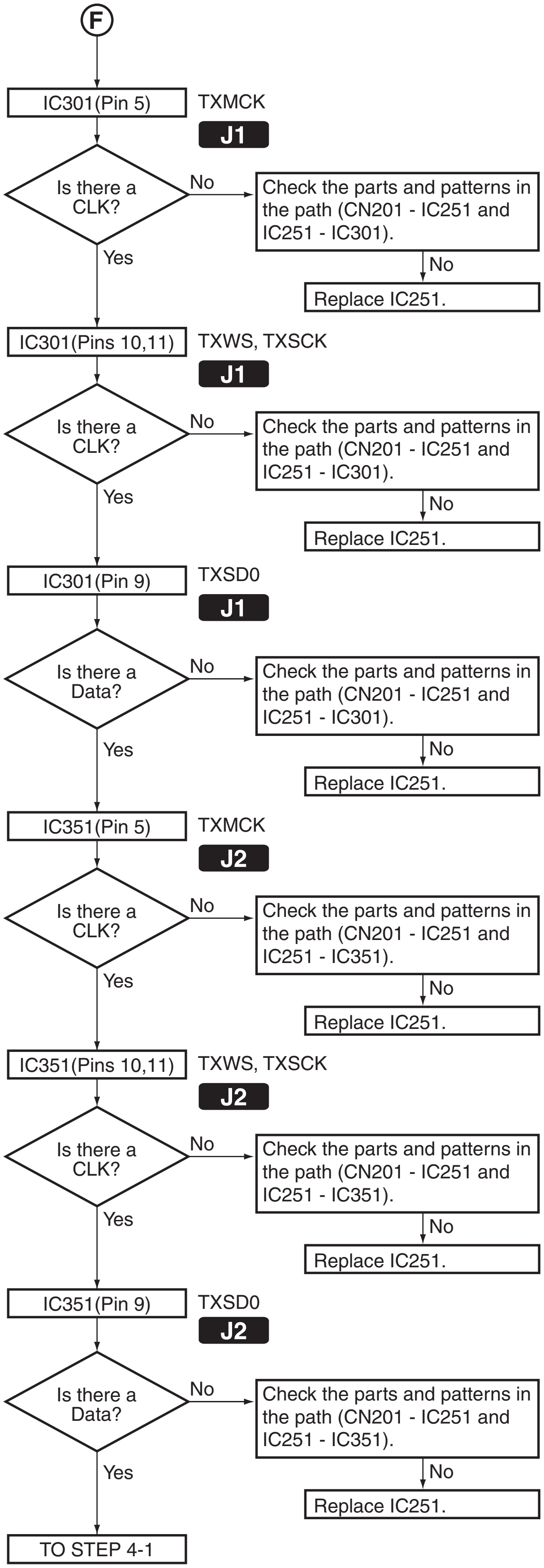

C
* When connected the source equipment to IN 3.
JA1104(Pin 16)
SDA(HDMI IN3) *
G5
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1104.
No
Replace JA1104.
Yes
JA1104(Pin 15)
SCL(HDMI IN3) *
G5
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1104.
No
Replace JA1104.
Yes
R1221
G6
Is there a same signal as SDA (IN3) (0 - 4.4 V) ?
No
Check the patterns in the path. Check the IC1204 and IC1208.
No
Replace IC1204 and IC1208.
Yes
R1220
G6
Is there a same signal as SCL (IN3) (0 - 4.4 V) ?
No
Check the patterns in the path. Check the IC1204 and IC1208.
No
Replace IC1204 and IC1208.
Yes
R108(Pin 7)
RXDSDA0
G2
Is there a same signal as SDA (IN3) (0 - 4.4 V) ?
No
Check the patterns in the path. Check the IC1204 and IC1208.
No
Replace IC1204 and IC1208.
Yes
R108(Pin 8)
RXDSCL0
G2
Is there a same signal as SCL (IN3) (0 - 4.4 V) ?
No
Check the patterns in the path. Check the IC1204 and IC1208.
No
Replace IC1204 and IC1208.
Yes
SC-LX81 only
JA301(Pin 16)
SDA(HDMI OUT1)
C1
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA301.
No
Replace JA301.
Yes
JA301(Pin 15)
SCL(HDMI OUT1)
C1
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA301.
No
Replace JA301.
Yes
R308
DSDA
G7
Is there a same signal as SDA (OUT1) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the R316 and R318.
No
Replace Q302.
Yes
R307
DSCL
G8
Is there a same signal as SCL (OUT1) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the R315 and R317.
No
Replace Q302.
Yes
JA351(Pin 16)
SDA(HDMI OUT2)
C2
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA351.
No
Replace JA351.
Yes
JA351(Pin 15)
SCL(HDMI OUT2)
C2
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA351.
No
Replace JA351.
Yes
R358
DSDA
G9
Is there a same signal as SDA (OUT2) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the R366 and R368.
No
Replace Q352.
Yes
R357
DSCL
G10
Is there a same signal as SCL (OUT2) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the R365 and R367.
No
Replace Q352.
Yes
D


D
Step 3-6: TMDS(INPUT)
* When connected the source equipment to BD IN.
IC1151(Pins 58,59, 61,62,64,65,67,68)
TMDS(BD IN) *
H1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of JA1101.
No
Replace JA1101.
Yes
* When connected the source equipment to IN1/IN1.
IC1151(Pins 38,39, 41,42,44,45,47,48)
TMDS(HDMI IN1/IN1) *
H1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of JA1102.
No
Replace JA1102.
Yes
* When connected the source equipment to IN2/IN2.
IC1151(Pins 18,19, 21,22,24,25,27,28)
TMDS(HDMI IN2/IN2) *
H1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of JA1103.
No
Replace JA1103.
Yes
* When connected the source equipment to IN3/IN3.
IC101(Pins 39,40, 43,44,47,48,51,52)
TMDS(HDMI IN3/IN3) *
F1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of JA1104.
No
Replace JA1104.
Yes
* When connected the source equipment to BD IN/IN1/IN2.
IC101 (Pins 57,58, 61,62,65,66,69,70)
TMDS(Rx1)
F1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of IC110* and JA110*.
No
Replace IC110*and JA110*.
Yes
Step 3-7: TMDS(OUTPUT)
SC-LX81 only
JA301(Pins 1,3,4,6, 7,9,10,12)
TMDS(HDMI OUT1)
G10
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the parts and patterns in the path (IC301 - JA301).
No
Replace IC301.
Yes
JA351(Pins 1,3,4,6, 7,9,10,12)
TMDS(HDMI OUT2)
G13
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the parts and patterns in the path (IC351 - JA351).
No
Replace IC351.
Yes
Step 3-8: AUDIO CLK,DATA (HDMI: AMP MODE)
IC203(Pin 2)
RXSPDIF
(DVD Dolby Digital)
I1
Is there a DATA?
No
Check the parts and patterns in the path (IC101 - IC203).
No
Replace IC101.
Yes
R209(Right Side)
SPDIF
I2
Is there a DATA?
No
Check the parts and patterns in the path (IC203 - IC205). Check the soldering of IC203, L204 and R209.
No
Replace IC203.
Yes
CN201(Pin 2)
HSPDIF
I3
Is there a DATA?
No
Check the parts (B side) and patterns in the path (IC205 - IC201). Check the soldering of IC205,L204 and R213.
No
Replace IC205.
No
Check the parts and patterns in the path (IC201 - CN201). Check the soldering of IC201, L207 and R206.
No
Replace IC201.
Yes
E

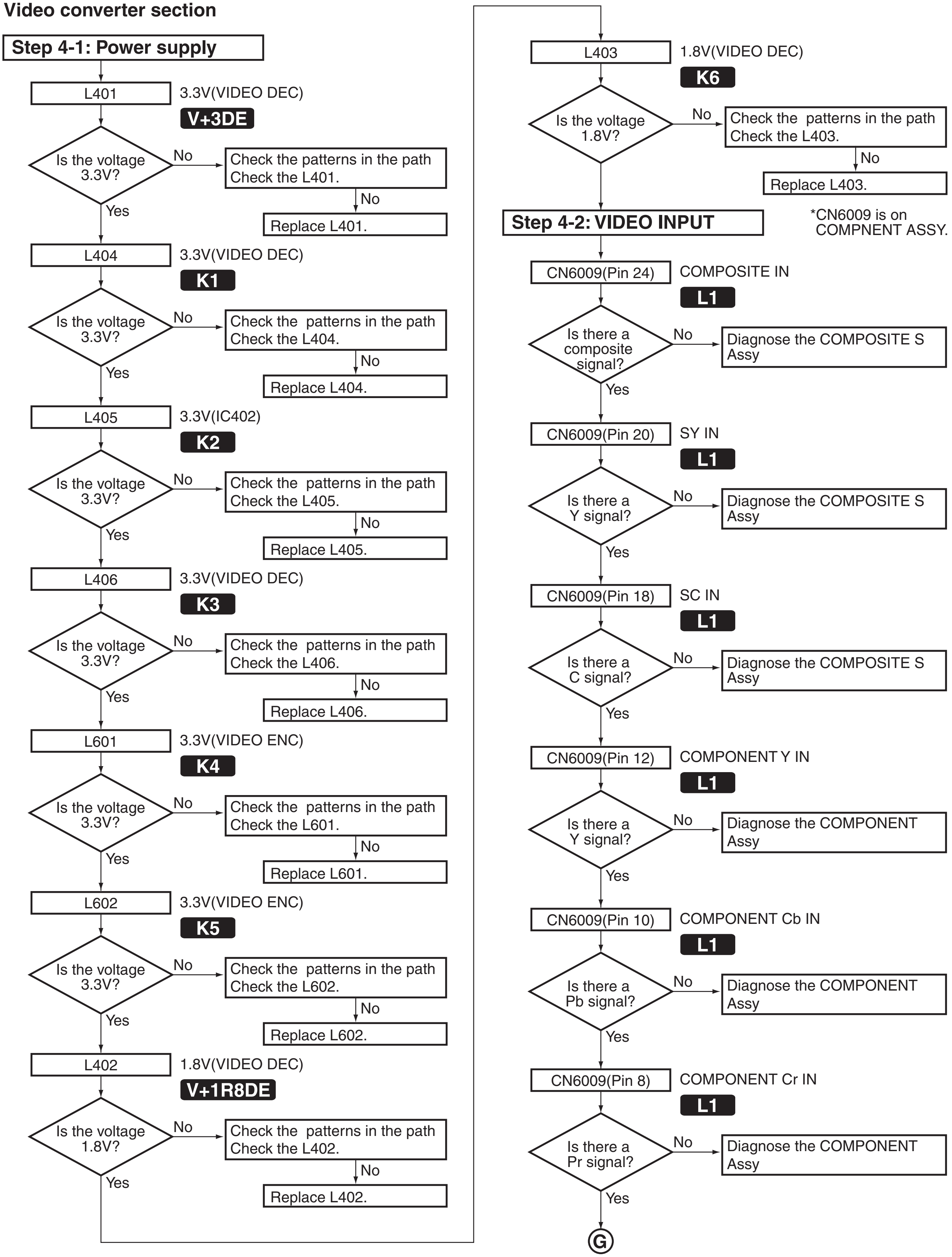

E
IC202(Pin 1)
RXMCK
I4
(DVD-A/Multi ch)
Is there a CLK?
No
Check the parts and patterns in the path (IC101 - IC202).
No
Replace IC101.
Yes
R223(Right Side)
MCLK
I5
Is there a CLK?
No
Check the parts and patterns in the path (IC202 - IC208).
No
Replace IC202.
Yes
CN201(Pin 10)
HMCK
I4
Is there a CLK?
No
Check the parts (IC204 is a Side B) and patterns in the path (IC208 - IC204). Check the soldering of IC204, L202 and R208.
No
Replace IC204.
No
Check the parts and patterns in the path (IC201 - CN201). Check the soldering of IC204, L202 and Control Signal.
No
Replace IC201.
Yes
R137(IC201 Side)
RXWS
I6
Is there a CLK?
No
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
Yes
R116(IC201 Side)
RXSCK
I7
Is there a CLK?
No
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
Yes
R115(Pins 1-4)
RXSD0-3
I8
Is there a DATA?
No
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
Yes
CN201(Pins 7,8)
HBCLK,LRCK
I4
Is there a CLK?
No
Check the parts and patterns in the path (IC201 - CN201). Check the soldering of IC201, L207 and Control Signal.
No
Replace IC201.
Yes
CN201(Pins 3-6)
H(F.C.S.B)ADAT
I4
Is there a DATA?
No
Check the parts and patterns in the path (IC201 - CN201). Check the soldering of IC201, L207 and Control Signal.
No
Replace IC201.
Yes
CN1002(Pin 5)
HDMUTE
I9
Is the voltage "L" (0 V)?
No
Check the parts and patterns in the path (IC501 - CN1002).
No
Replace IC501.
Yes
Diagnose the INTERFACE ASSY or D-MOTHER ASSY.

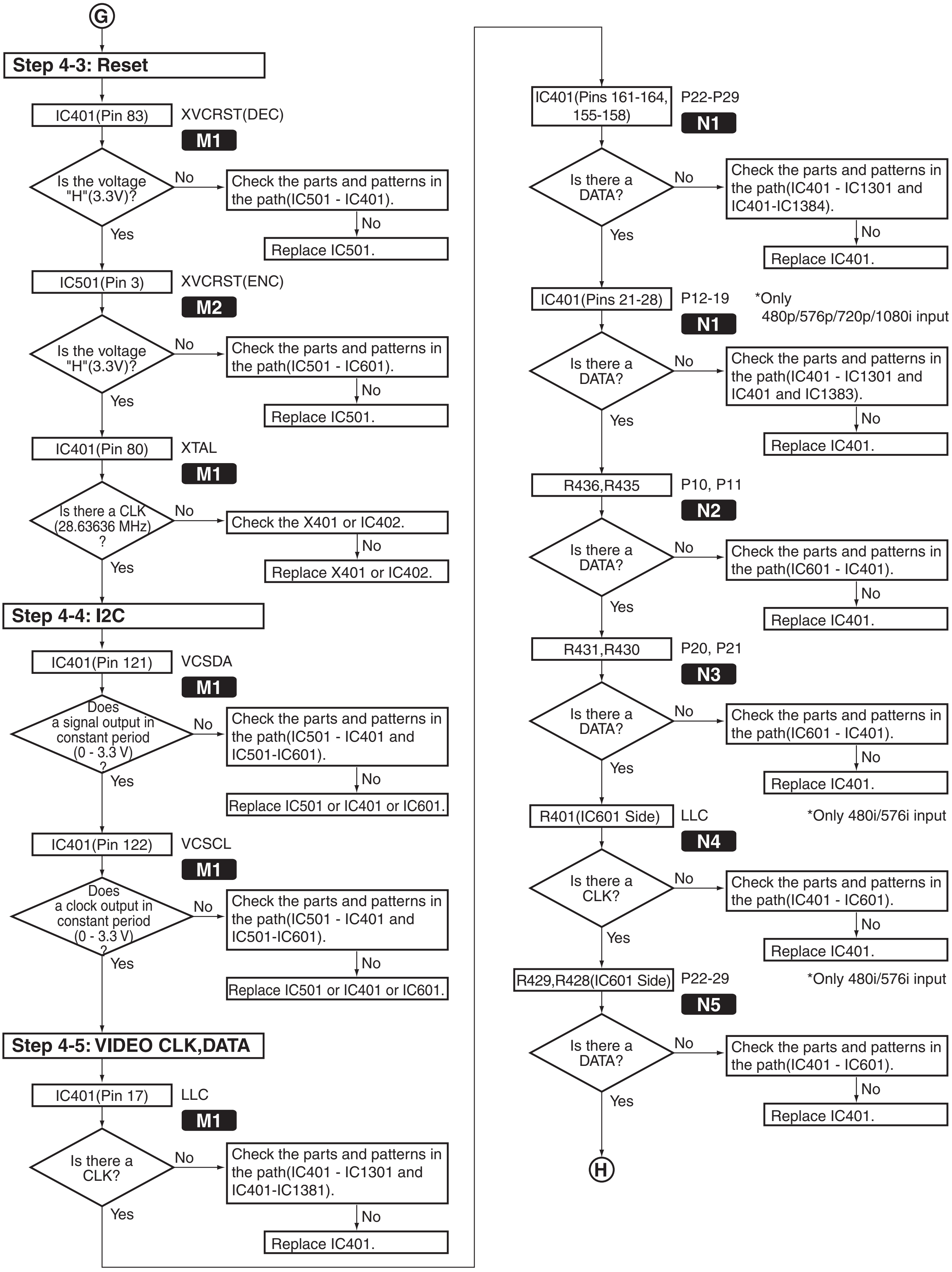
Step 3-9: AUDIO CLK, DATA (HDMI:THROUGH MODE, ANALOG VIDEO FUNCTION)

CN201(Pin 18)
BMCLK
I3
Is there a CLK?
No
Diagnosis the INTERFACE ASSY or D-MOTHER ASSY.
Yes
CN201(Pins 20,21)
BLRCK, BBCK
I3
Is there a CLK?
No
Diagnosis the INTERFACE ASSY or D-MOTHER ASSY.
Yes
CN201(Pin 22)
BFADT
I3
Is there a DATA?
No
Diagnosis the INTERFACE ASSY or D-MOTHER ASSY.
Yes
F


F
IC301(Pin 5)
TXMCK
J1
Is there a CLK?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC301).
No
Replace IC251.
Yes
IC301(Pins 10,11)
TXWS, TXSCK
J1
Is there a CLK?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC301).
No
Replace IC251.
Yes
IC301(Pin 9)
TXSD0
J1
Is there a Data?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC301).
No
Replace IC251.
Yes
IC351(Pin 5)
TXMCK
J2
Is there a CLK?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC351).
No
Replace IC251.
Yes
IC351(Pins 10,11)
TXWS, TXSCK
J2
Is there a CLK?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC351).
No
Replace IC251.
Yes
IC351(Pin 9)
TXSD0
J2
Is there a Data?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC351).
No
Replace IC251.
Yes
TO STEP 4-1

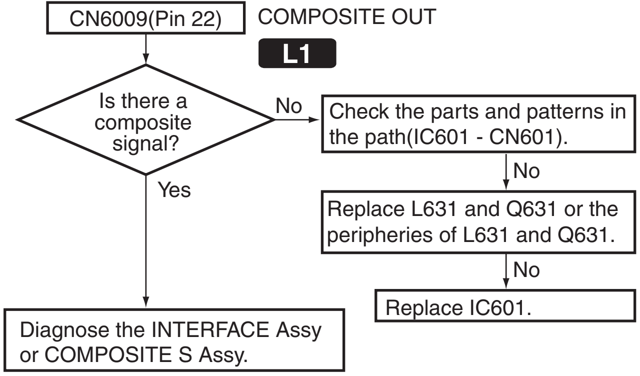
Video converter section

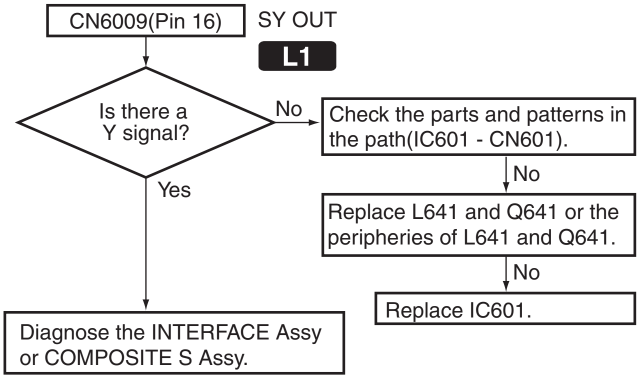

Step 4-1: Power supply
L401
3.3V(VIDEO DEC)
V+3DE
Is the voltage 3.3V?
No
Check the patterns in the path Check the L401.
No
Replace L401.
Yes
L404
3.3V(VIDEO DEC)
K1
Is the voltage 3.3V?
No
Check the patterns in the path Check the L404.
No
Replace L404.
Yes
L405
3.3V(IC402)
K2
Is the voltage 3.3V?
No
Check the patterns in the path Check the L405.
No
Replace L405.
Yes
L406
3.3V(VIDEO DEC)
K3
Is the voltage 3.3V?
No
Check the patterns in the path Check the L406.
No
Replace L406.
Yes
L601
3.3V(VIDEO ENC)
K4
Is the voltage 3.3V?
No
Check the patterns in the path Check the L601.
No
Replace L601.
Yes
L602
3.3V(VIDEO ENC)
K5
Is the voltage 3.3V?
No
Check the patterns in the path Check the L602.
No
Replace L602.
Yes
L402
1.8V(VIDEO DEC)
V+1R8DE
Is the voltage 1.8V?
No
Check the patterns in the path Check the L402.
No
Replace L402.
Yes
L403
1.8V(VIDEO DEC)
K6
Is the voltage 1.8V?
No
Check the patterns in the path Check the L403.
No
Replace L403.
Step 4-2: VIDEO INPUT
*CN6009 is on COMPNENT ASSY.
CN6009(Pin 24)
COMPOSITE IN
L1
Is there a composite signal?
No
Diagnose the COMPOSITE S Assy
Yes
CN6009(Pin 20)
SY IN
L1
Is there a Y signal?
No
Diagnose the COMPOSITE S Assy
Yes
CN6009(Pin 18)
SC IN
L1
Is there a C signal?
No
Diagnose the COMPOSITE S Assy
Yes
CN6009(Pin 12)
COMPONENT Y IN
L1
Is there a Y signal?
No
Diagnose the COMPONENT Assy
Yes
CN6009(Pin 10)
COMPONENT Cb IN
L1
Is there a Pb signal?
No
Diagnose the COMPONENT Assy
Yes
CN6009(Pin 8)
COMPONENT Cr IN
L1
Is there a Pr signal?
No
Diagnose the COMPONENT Assy
Yes
G

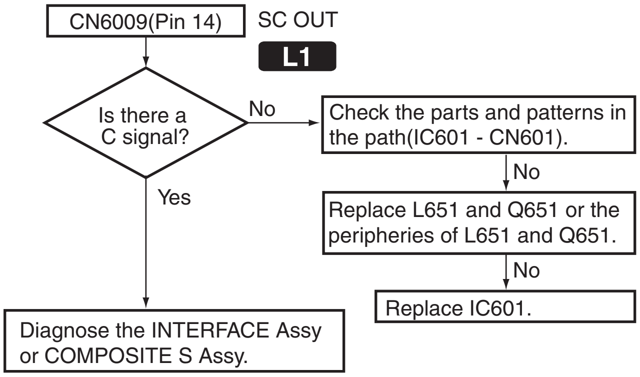

G
Step 4-3: Reset
IC401(Pin 83)
XVCRST(DEC)
M1
Is the voltage "H"(3.3V)?
No
Check the parts and patterns in the path(IC501 - IC401).
No
Replace IC501.
Yes
IC501(Pin 3)
XVCRST(ENC)
M2
Is the voltage "H"(3.3V)?
No
Check the parts and patterns in the path(IC501 - IC601).
No
Replace IC501.
Yes
IC401(Pin 80)
XTAL
M1
Is there a CLK (28.63636 MHz) ?
No
Check the X401 or IC402.
No
Replace X401 or IC402.
Yes
Step 4-4: I2C
IC401(Pin 121)
VCSDA
M1
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC401 and IC501-IC601).
No
Replace IC501 or IC401 or IC601.
Yes
IC401(Pin 122)
VCSCL
M1
Does a clock output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC401 and IC501-IC601).
No
Replace IC501 or IC401 or IC601.
Yes
Step 4-5: VIDEO CLK,DATA
IC401(Pin 17)
LLC
M1
Is there a CLK?
No
Check the parts and patterns in the path(IC401 - IC1301 and IC401-IC1381).
No
Replace IC401.
Yes
IC401(Pins 161-164, 155-158)
P22-P29
N1
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC1301 and IC401-IC1384).
No
Replace IC401.
Yes
IC401(Pins 21-28)
P12-19
*Only 480p/576p/720p/1080i input
N1
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC1301 and IC401 and IC1383).
No
Replace IC401.
Yes
R436,R435
P10, P11
N2
Is there a DATA?
No
Check the parts and patterns in the path(IC601 - IC401).
No
Replace IC401.
Yes
R431,R430
P20, P21
N3
Is there a DATA?
No
Check the parts and patterns in the path(IC601 - IC401).
No
Replace IC401.
Yes
R401(IC601 Side)
LLC
*Only 480i/576i input
N4
Is there a CLK?
No
Check the parts and patterns in the path(IC401 - IC601).
No
Replace IC401.
Yes
R429,R428(IC601 Side)
P22-29
*Only 480i/576i input
N5
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC601).
No
Replace IC401.
Yes
H

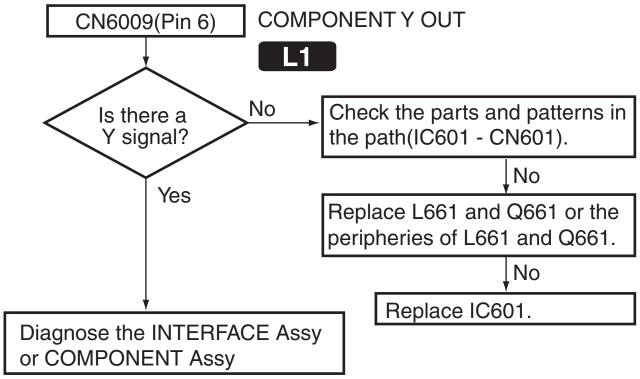
Step 4-6: VIDEO OUTPUT

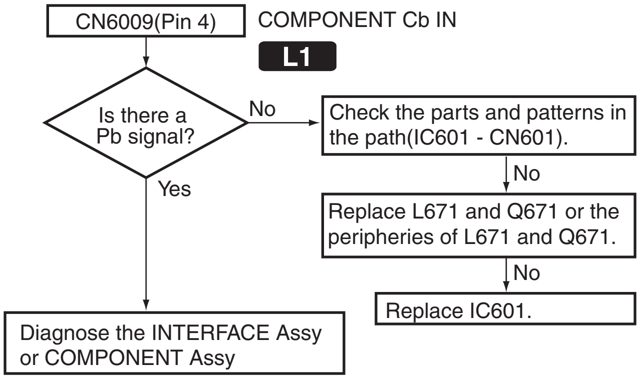
*Only 480i/576i input

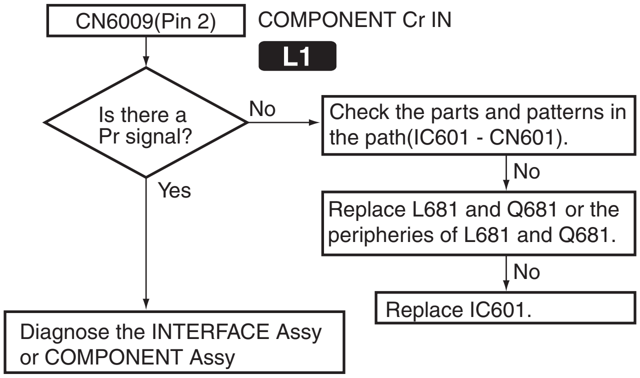

CN6009(Pin 22)
COMPOSITE OUT
L1
Is there a composite signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L631 and Q631 or the peripheries of L631 and Q631.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPOSITE S Assy.


CN6009(Pin 16)
SY OUT
L1
Is there a Y signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L641 and Q641 or the peripheries of L641 and Q641.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPOSITE S Assy.

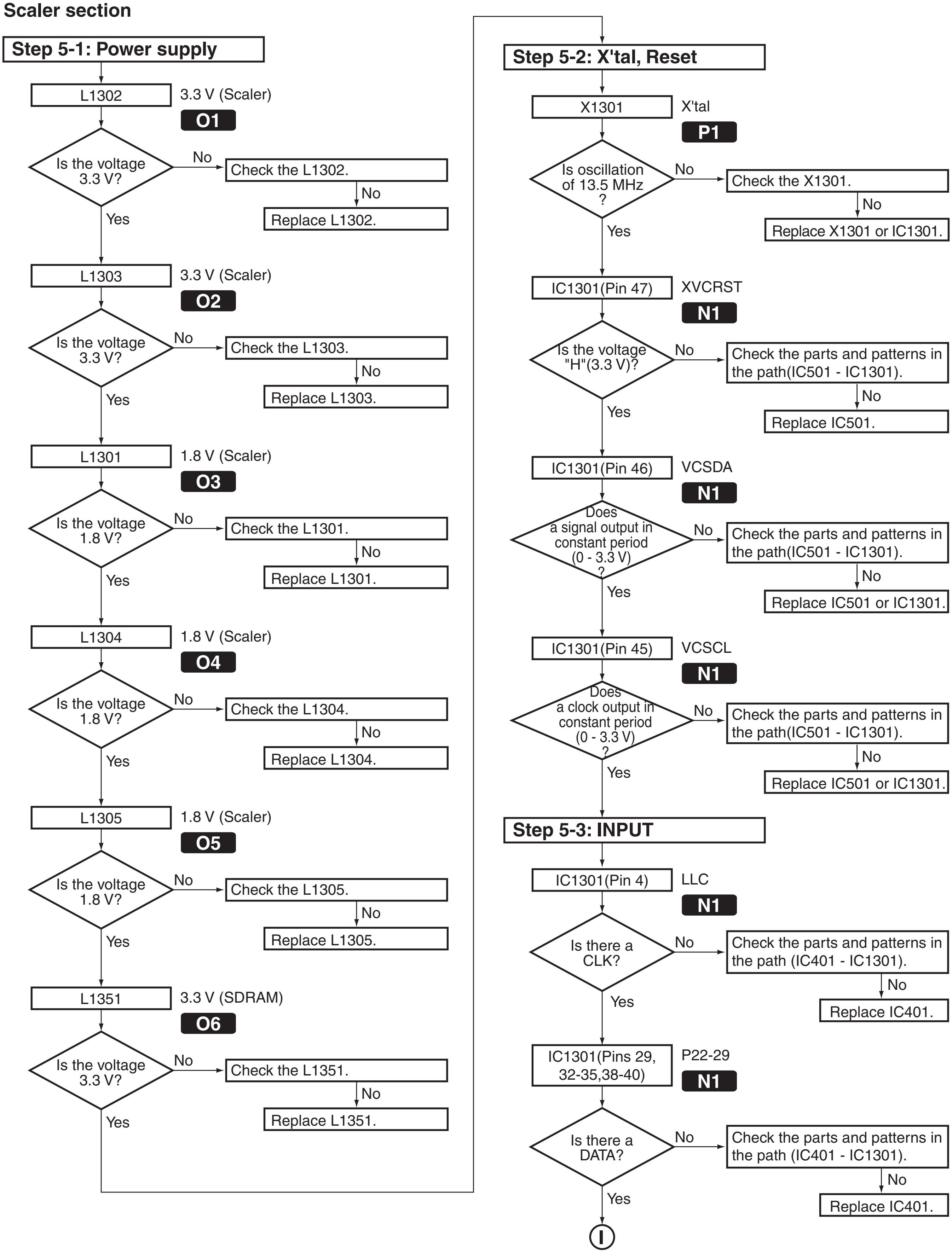

CN6009(Pin 14)
SC OUT
L1
Is there a C signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L651 and Q651 or the peripheries of L651 and Q651.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPOSITE S Assy.

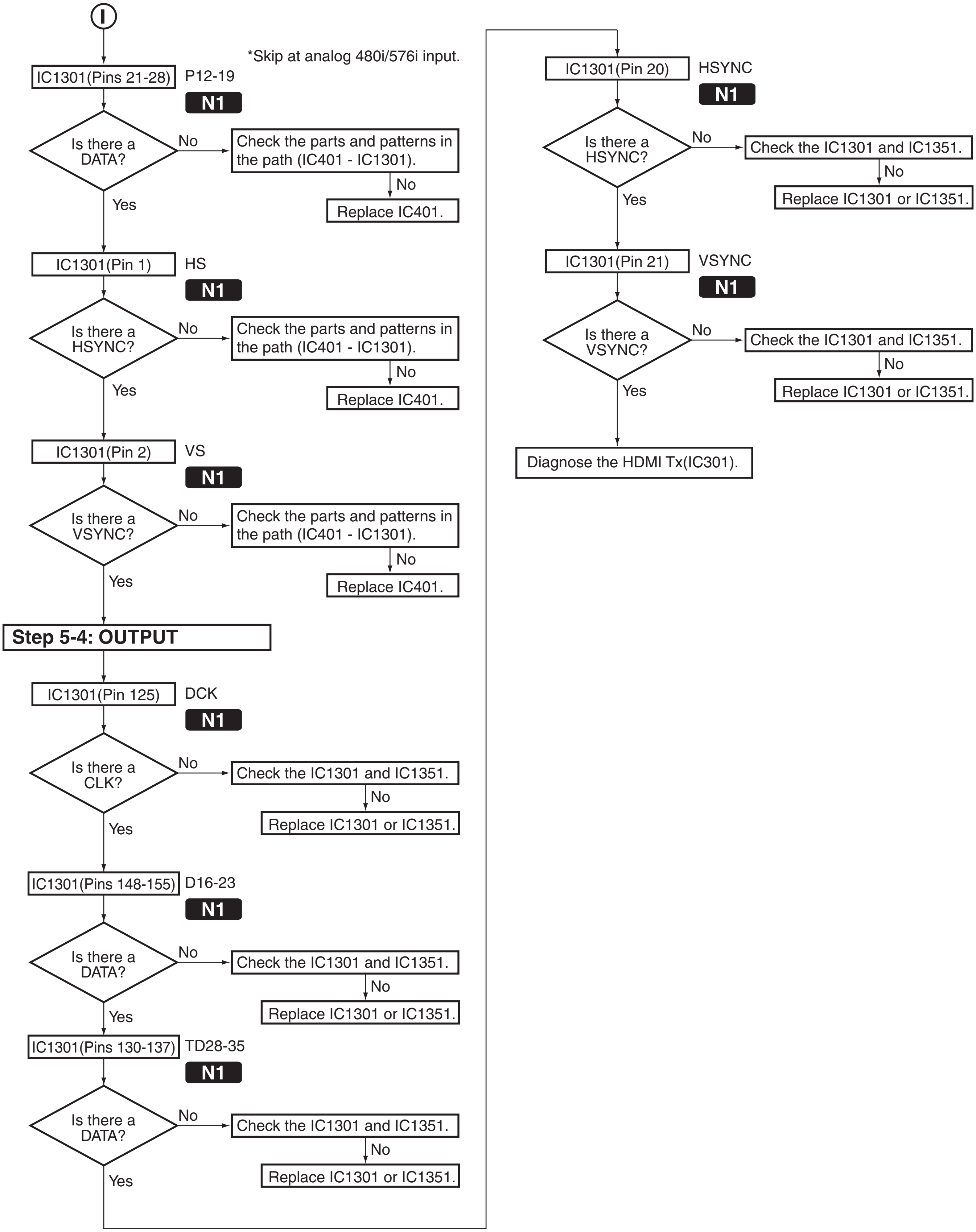

CN6009(Pin 6)
COMPONENT Y OUT
L1
Is there a Y signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L661 and Q661 or the peripheries of L661 and Q661.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPONENT Assy


CN6009(Pin 4)
COMPONENT Cb IN
L1
Is there a Pb signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L671 and Q671 or the peripheries of L671 and Q671.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPONENT Assy

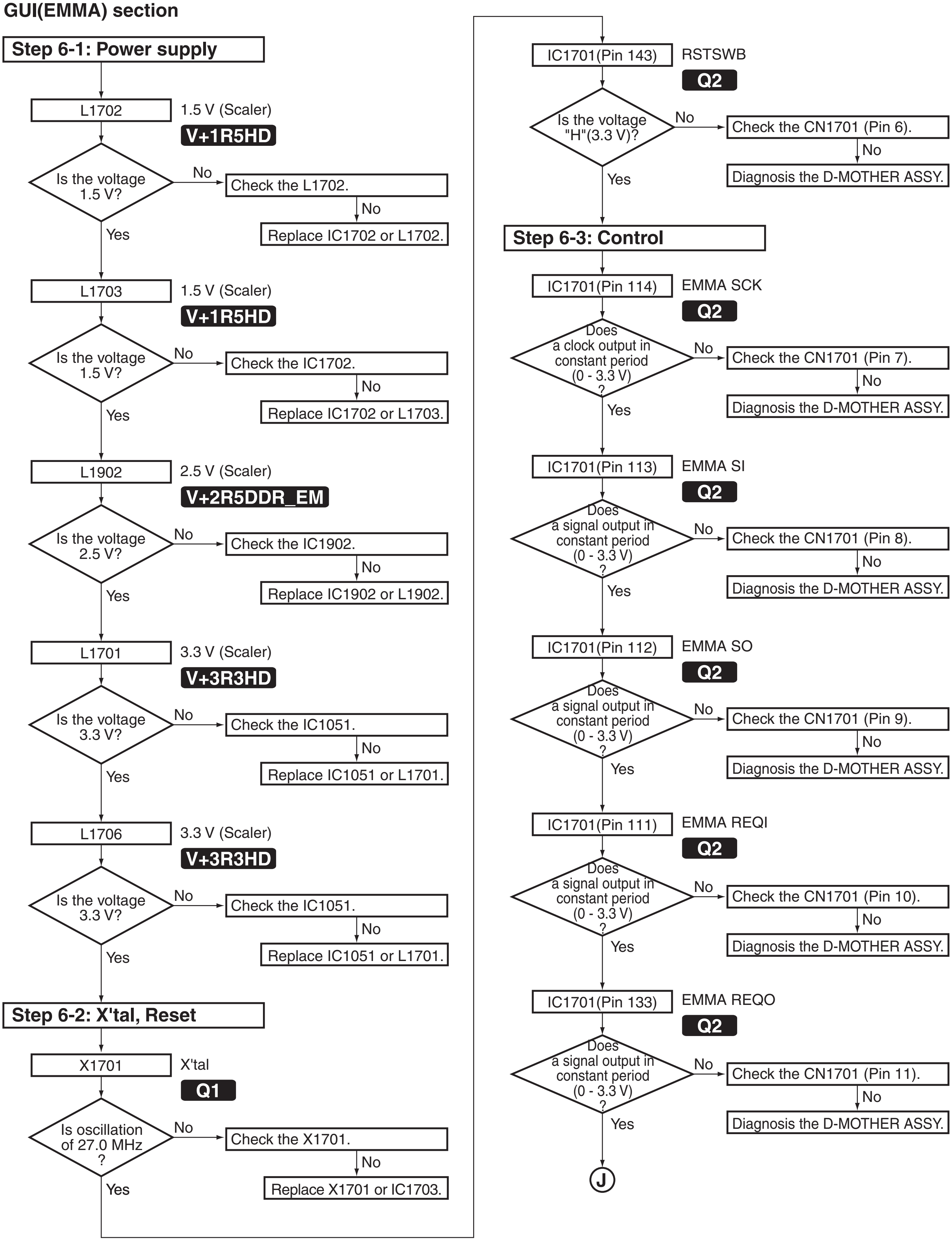

CN6009(Pin 2)
COMPONENT Cr IN
L1
Is there a Pr signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L681 and Q681 or the peripheries of L681 and Q681.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPONENT Assy

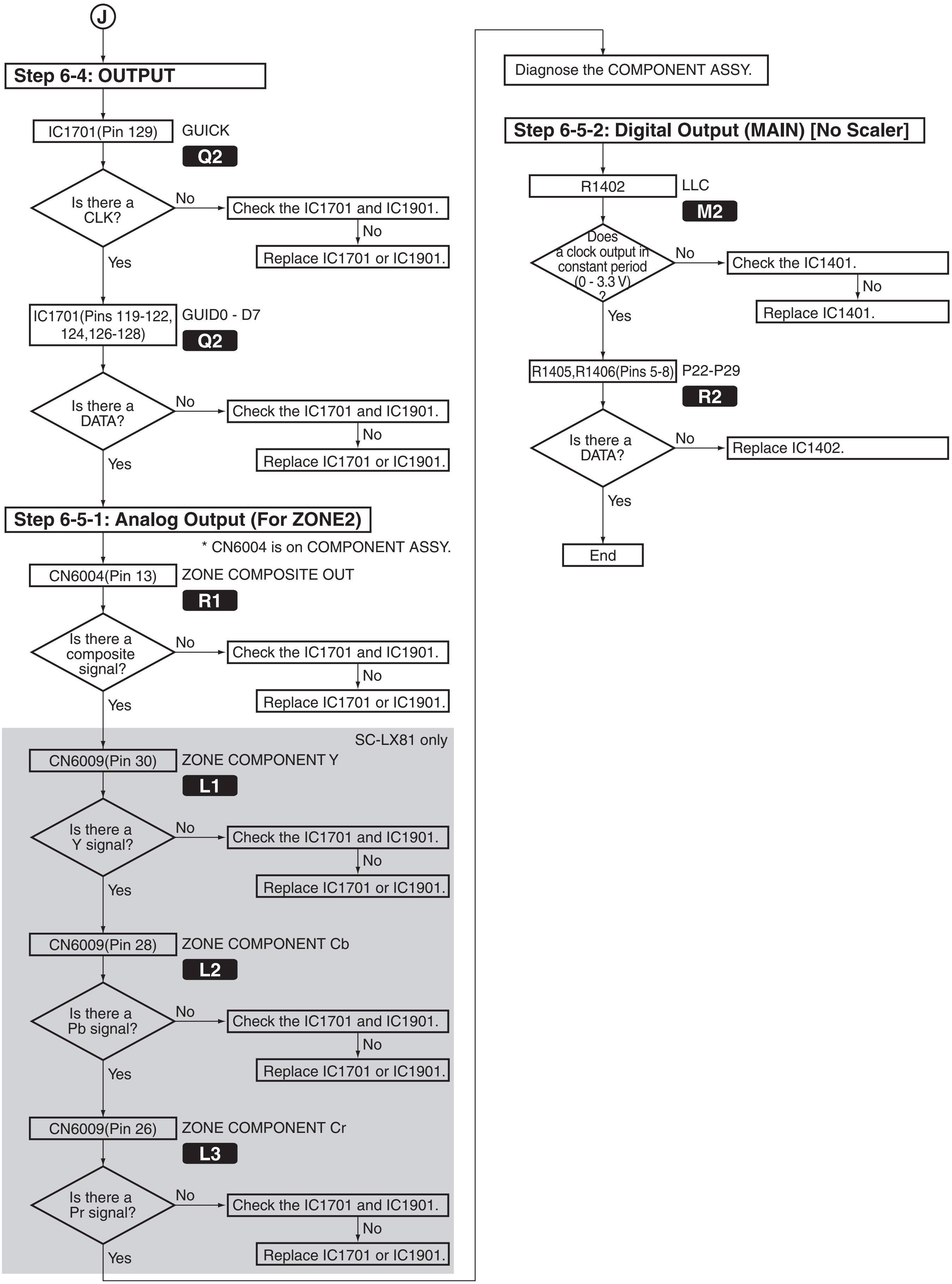
Scaler section


Step 5-1: Power supply
L1302
3.3 V (Scaler)
O1
Is the voltage 3.3 V?
No
Check the L1302.
No
Replace L1302.
Yes
L1303
3.3 V (Scaler)
O2
Is the voltage 3.3 V?
No
Check the L1303.
No
Replace L1303.
Yes
L1301
1.8 V (Scaler)
O3
Is the voltage 1.8 V?
No
Check the L1301.
No
Replace L1301.
Yes
L1304
1.8 V (Scaler)
O4
Is the voltage 1.8 V?
No
Check the L1304.
No
Replace L1304.
Yes
L1305
1.8 V (Scaler)
O5
Is the voltage 1.8 V?
No
Check the L1305.
No
Replace L1305.
Yes
L1351
3.3 V (SDRAM)
O6
Is the voltage 3.3 V?
No
Check the L1351.
No
Replace L1351.
Yes
Step 5-2: X'tal, Reset
X1301
X'tal
P1
Is oscillation of 13.5 MHz ?
No
Check the X1301.
No
Replace X1301 or IC1301.
Yes
IC1301(Pin 47)
XVCRST
N1
Is the voltage "H"(3.3 V)?
No
Check the parts and patterns in the path(IC501 - IC1301).
No
Replace IC501.
Yes
IC1301(Pin 46)
VCSDA
N1
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC1301).
No
Replace IC501 or IC1301.
Yes
IC1301(Pin 45)
VCSCL
N1
Does a clock output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC1301).
No
Replace IC501 or IC1301.
Yes
Step 5-3: INPUT
IC1301(Pin 4)
LLC
N1
Is there a CLK?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
IC1301(Pins 29, 32-35,38-40)
P22-29
N1
Is there a DATA?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
I


I
*Skip at analog 480i/576i input.
IC1301(Pins 21-28)
P12-19
N1
Is there a DATA?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
IC1301(Pin 1)
HS
N1
Is there a HSYNC?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
IC1301(Pin 2)
VS
N1
Is there a VSYNC?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
Step 5-4: OUTPUT
IC1301(Pin 125)
DCK
N1
Is there a CLK?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pins 148-155)
D16-23
N1
Is there a DATA?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pins 130-137)
TD28-35
N1
Is there a DATA?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pin 20)
HSYNC
N1
Is there a HSYNC?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pin 21)
VSYNC
N1
Is there a VSYNC?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
Diagnose the HDMI Tx(IC301).

GUI(EMMA) section

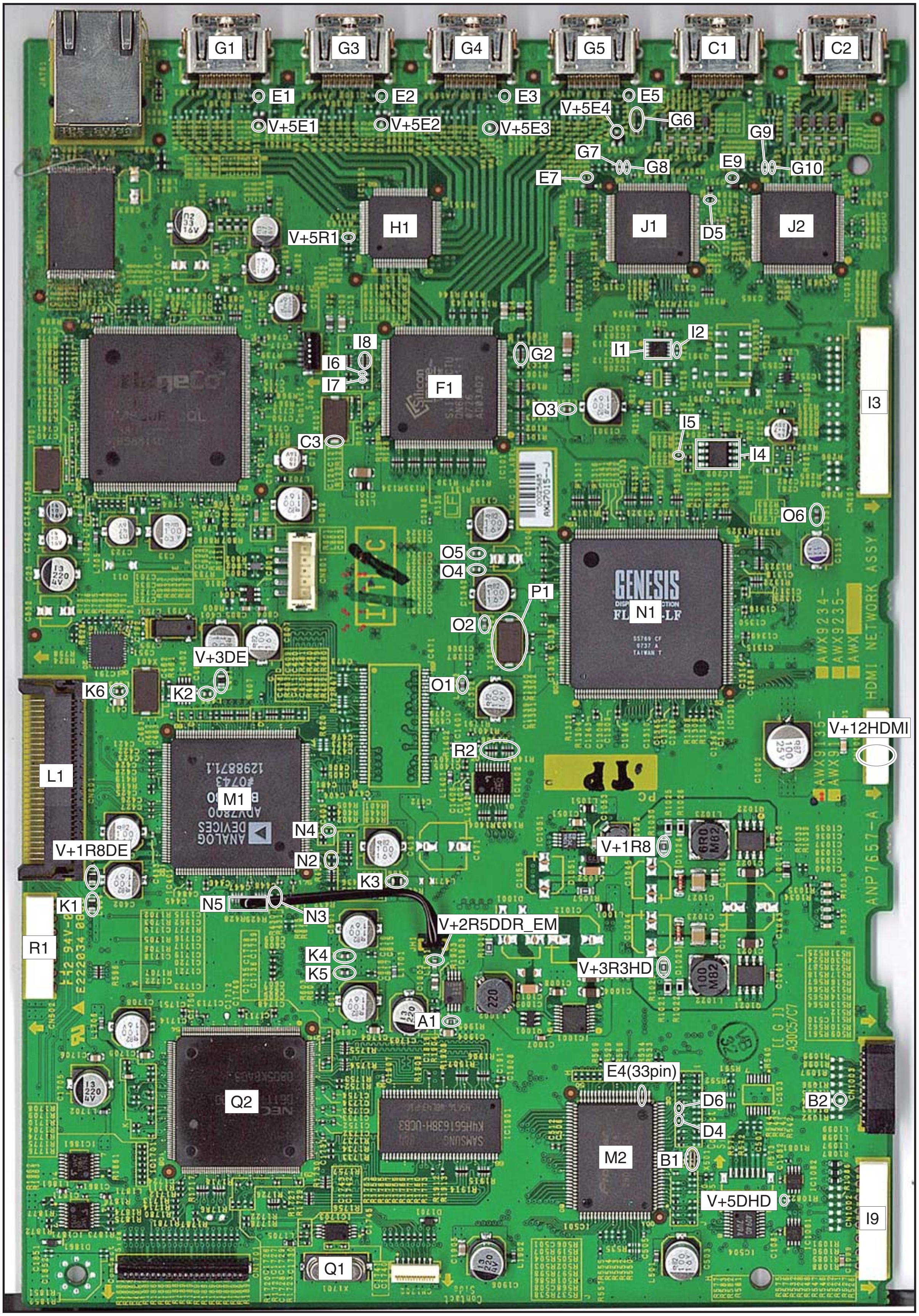

Step 6-1: Power supply
L1702
1.5 V (Scaler)
V+1R5HD
Is the voltage 1.5 V?
No
Check the L1702.
No
Replace IC1702 or L1702.
Yes
L1703
1.5 V (Scaler)
V+1R5HD
Is the voltage 1.5 V?
No
Check the IC1702.
No
Replace IC1702 or L1703.
Yes
L1902
2.5 V (Scaler)
V+2R5DDR_EM
Is the voltage 2.5 V?
No
Check the IC1902.
No
Replace IC1902 or L1902.
Yes
L1701
3.3 V (Scaler)
V+3R3HD
Is the voltage 3.3 V?
No
Check the IC1051.
No
Replace IC1051 or L1701.
Yes
L1706
3.3 V (Scaler)
V+3R3HD
Is the voltage 3.3 V?
No
Check the IC1051.
No
Replace IC1051 or L1701.
Yes
Step 6-2: X'tal, Reset
X1701
X'tal
Q1
Is oscillation of 27.0 MHz ?
No
Check the X1701.
No
Replace X1701 or IC1703.
Yes
IC1701(Pin 143)
RSTSWB
Q2
Is the voltage "H"(3.3 V)?
No
Check the CN1701 (Pin 6).
No
Diagnosis the D-MOTHER ASSY.
Yes
Step 6-3: Control
IC1701(Pin 114)
EMMA SCK
Q2
Does a clock output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 7).
No
Diagnosis the D-MOTHER ASSY.
Yes
IC1701(Pin 113)
EMMA SI
Q2
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 8).
No
Diagnosis the D-MOTHER ASSY.
Yes
IC1701(Pin 112)
EMMA SO
Q2
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 9).
No
Diagnosis the D-MOTHER ASSY.
Yes
IC1701(Pin 111)
EMMA REQI
Q2
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 10).
No
Diagnosis the D-MOTHER ASSY.
Yes
IC1701(Pin 133)
EMMA REQO
Q2
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 11).
No
Diagnosis the D-MOTHER ASSY.
Yes
J


J
Step 6-4: OUTPUT
IC1701(Pin 129)
GUICK
Q2
Is there a CLK?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
IC1701(Pins 119-122, 124,126-128)
GUID0 - D7
Q2
Is there a DATA?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
Step 6-5-1: Analog Output (For ZONE2)
* CN6004 is on COMPONENT ASSY.
CN6004(Pin 13)
ZONE COMPOSITE OUT
R1
Is there a composite signal?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
SC-LX81 only
CN6009(Pin 30)
ZONE COMPONENT Y
L1
Is there a Y signal?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
CN6009(Pin 28)
ZONE COMPONENT Cb
L2
Is there a Pb signal?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
CN6009(Pin 26)
ZONE COMPONENT Cr
L3
Is there a Pr signal?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
Diagnose the COMPONENT ASSY.
Step 6-5-2: Digital Output (MAIN) [No Scaler]
R1402
LLC
M2
Does a clock output in constant period (0 - 3.3 V) ?
No
Check the IC1401.
No
Replace IC1401.
Yes
R1405,R1406(Pins 5-8)
P22-P29
R2
Is there a DATA?
No
Replace IC1402.
Yes
End

1) HDMI NETWORK Assy check points

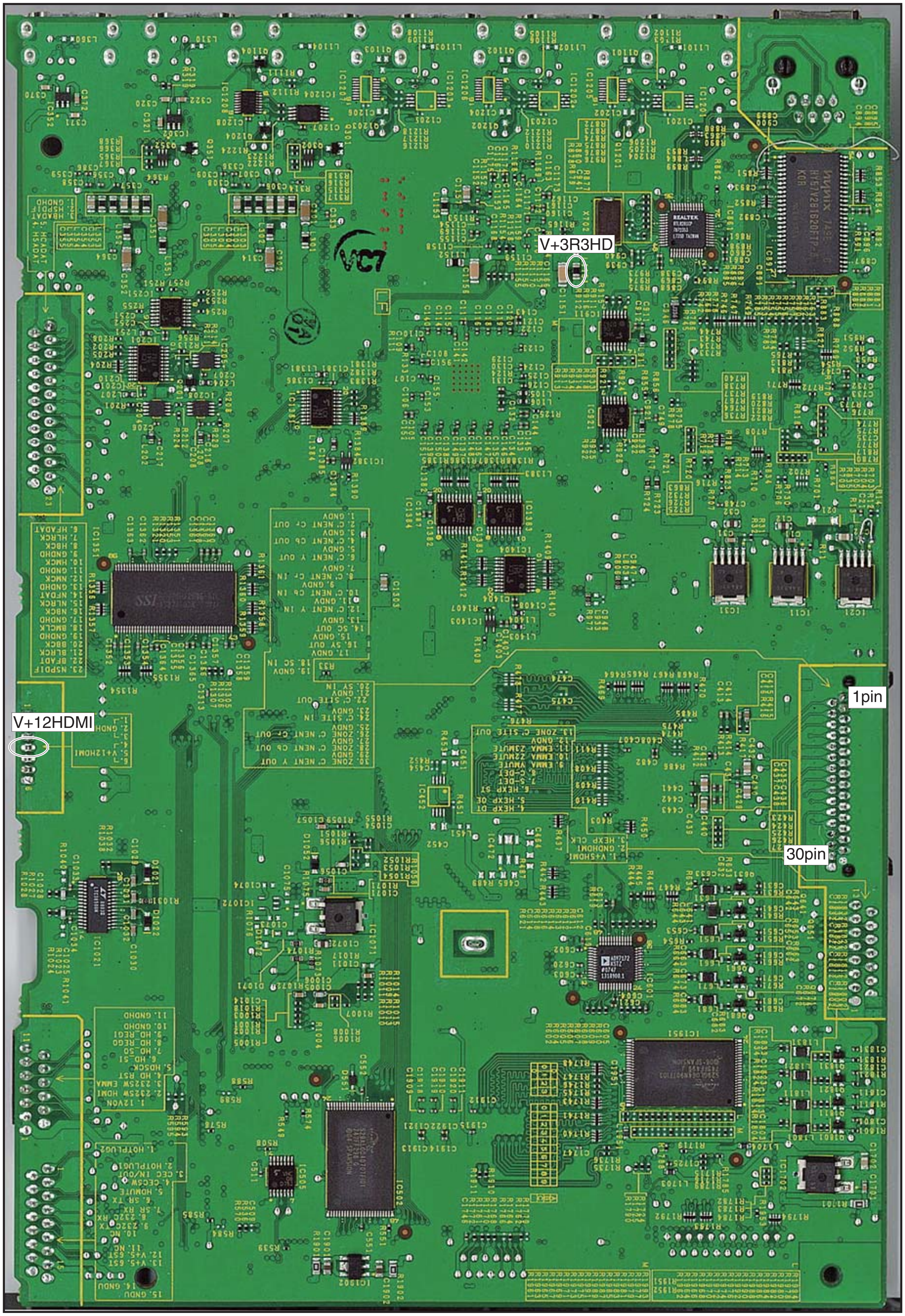
E HDMI NETWORK ASSY

SIDE A


G1
G3
G4
G5
C1
C2
E1
E2
E3
E5
V+5E4
G6
V+5E1
V+5E2
V+5E3
G9
G7
G8
E9
G10
E7
D5
V+5R1
H1
J1
J2
I2
I8
G2
I1
I6
F1
I7
I3
O3
I5
C3
I4
O6
O5
O4
P1
N1
O2
V+3DE
O1
K6
K2
V+12HDMI
R2
L1
M1
N4
V+1R8
N2
V+1R8DE
K3
K1
N5
N3
V+2R5DDR_EM
R1
K4
V+3R3HD
K5
A1
E4(33pin)
D6
B2
Q2
D4
M2
B1
V+5DHD
I9
Q1

E HDMI NETWORK ASSY

SIDE B

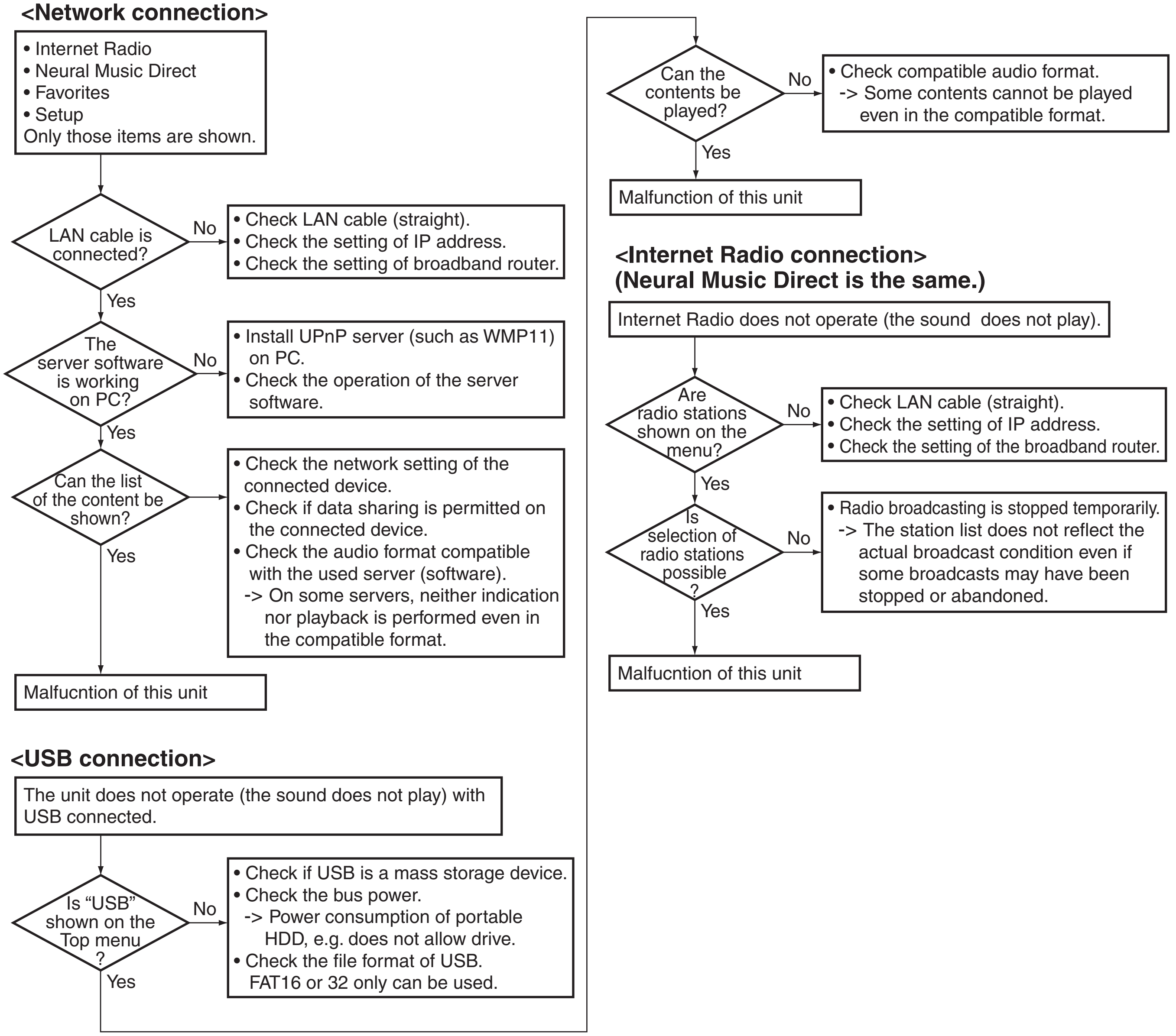

V+3R3HD
1pin
V+12HDMI
30pin

[4] Diagnosis of The Network Block

1) Constitution of network function

CD --- ..... -- HDMI4 ---- HOME MEDIA GALLERY --
- USB
- Internet Radio
- Neural Music Direct -> Internet radio run by Neural
- Server1
- Server2
- Server3
- Favorites
- Setup
  - Information
    - Firmware Version -> Indicates the version of the firmware.
    - MAC Address -> Indicates MAC Address.
    - IP Address -> Indicates IP Address.
    - Gateway IP -> Indicates Gateway IP.
    - Proxy Server -> Indicates if Proxy Server is valid or invalid.
    - Subnet Mask -> Indicates Subnet Mask.
  - Network Setup

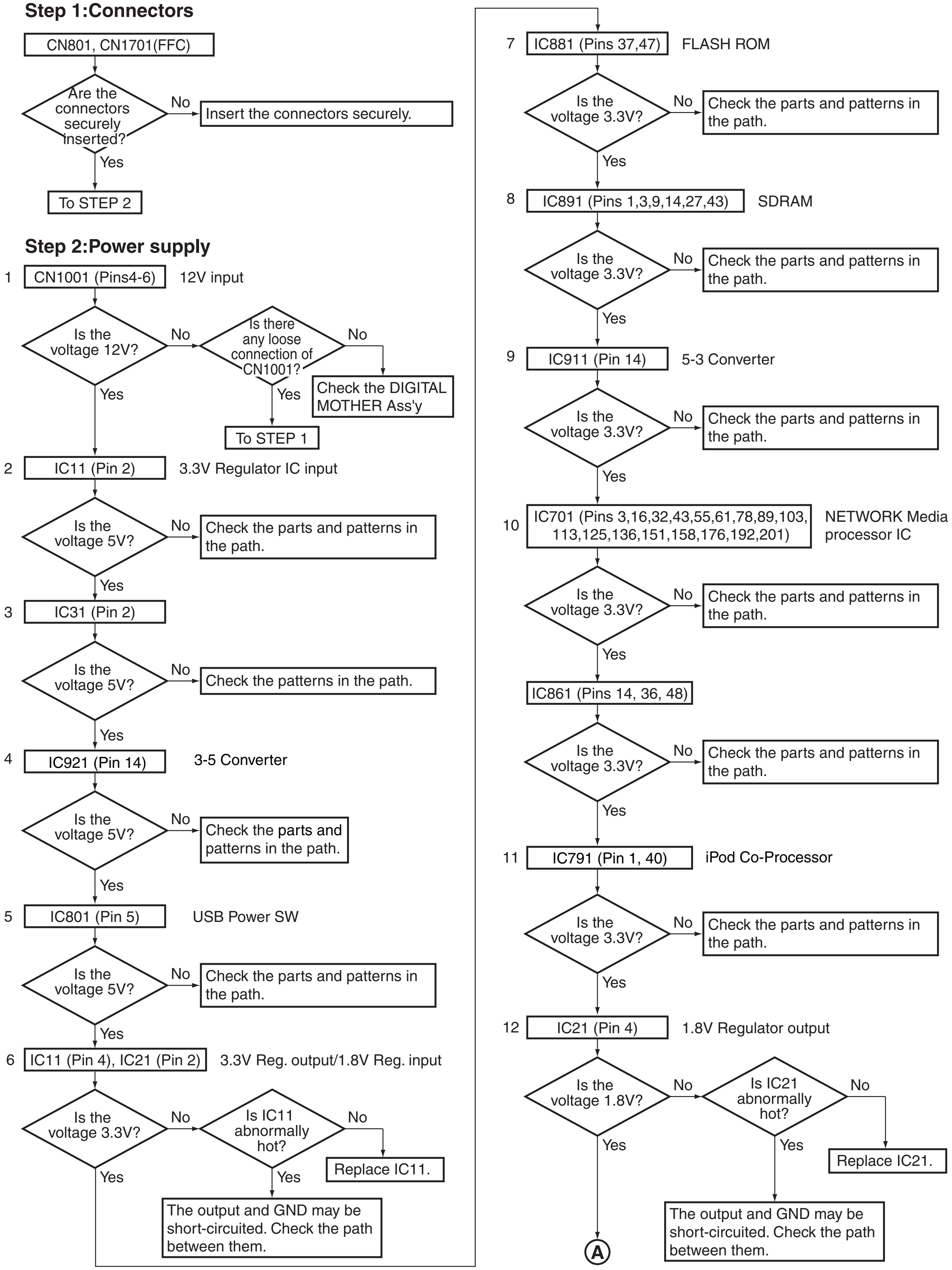
2) Flow chart for isolation of network malfunction

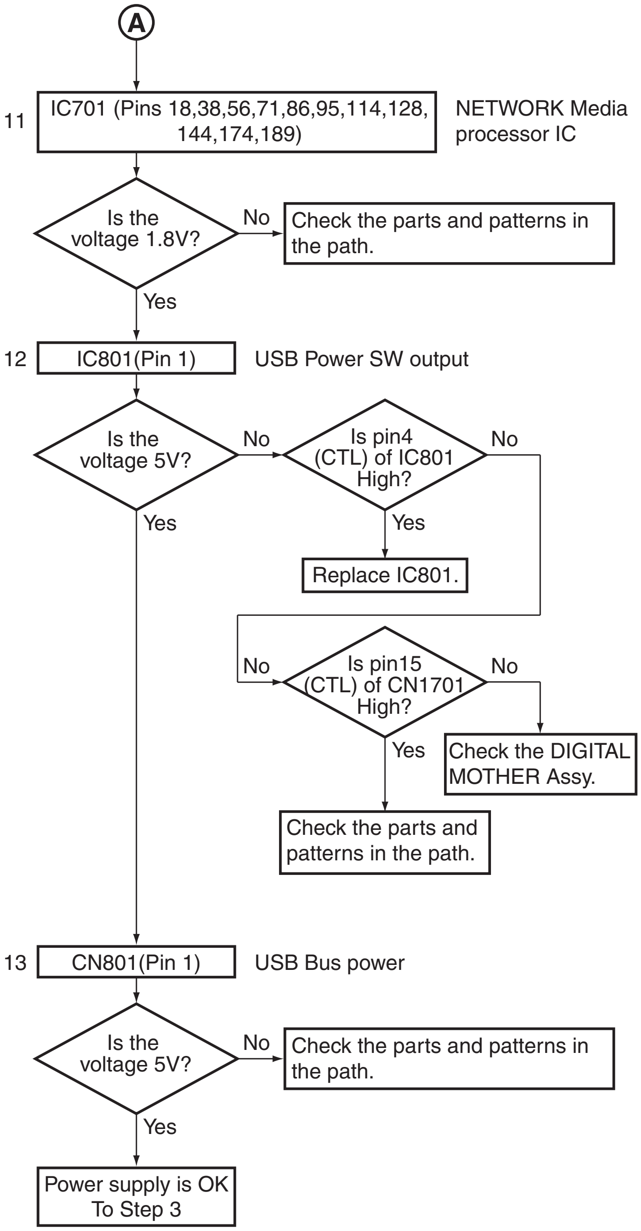

<Network connection>
• Internet Radio
• Neural Music Direct
• Favorites
• Setup
Only those items are shown.
LAN cable is connected?
No
• Check LAN cable (straight).
• Check the setting of IP address.
• Check the setting of broadband router.
Yes
The server software is working on PC?
No
• Install UPnP server (such as WMP11) on PC.
• Check the operation of the server software.
Yes
Can the list of the content be shown?
• Check the network setting of the connected device.
• Check if data sharing is permitted on the connected device.
• Check the audio format compatible with the used server (software).
-> On some servers, neither indication nor playback is performed even in the compatible format.
Yes
Malfucntion of this unit
<USB connection>
The unit does not operate (the sound does not play) with USB connected.
Is "USB" shown on the Top menu ?
No
• Check if USB is a mass storage device.
• Check the bus power.
-> Power consumption of portable HDD, e.g. does not allow drive.
• Check the file format of USB. FAT16 or 32 only can be used.
Yes
Can the contents be played?
No
• Check compatible audio format.
-> Some contents cannot be played even in the compatible format.
Yes
Malfunction of this unit
<Internet Radio connection>
(Neural Music Direct is the same.)
Internet Radio does not operate (the sound does not play).
Are radio stations shown on the menu?
No
• Check LAN cable (straight).
• Check the setting of IP address.
• Check the setting of the broadband router.
Yes
Is selection of radio stations possible ?
No
• Radio broadcasting is stopped temporarily.
-> The station list does not reflect the actual broadcast condition even if some broadcasts may have been stopped or abandoned.
Yes
Malfucntion of this unit

3) Network block troubleshooting

Step 1:Connectors

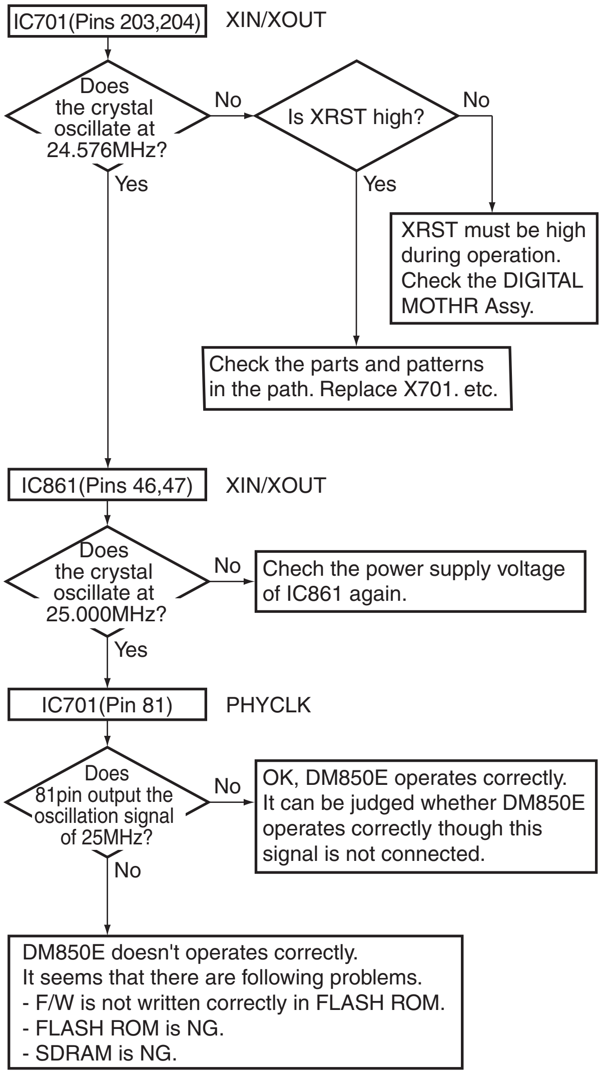
Step 2:Power supply


CN801, CN1701(FFC)
Are the connectors securely inserted?
No
Insert the connectors securely.
Yes
To STEP 2
1
CN1001 (Pins4-6)
12V input
Is the voltage 12V?
No
Is there any loose connection of CN1001?
No
Check the DIGITAL MOTHER Ass'y
Yes
To STEP 1
Yes
2
IC11 (Pin 2)
3.3V Regulator IC input
Is the voltage 5V?
No
Check the parts and patterns in the path.
Yes
3
IC31 (Pin 2)
Is the voltage 5V?
No
Check the patterns in the path.
Yes
4
IC921 (Pin 14)
3-5 Converter
Is the voltage 5V?
No
Check the parts and patterns in the path.
Yes
5
IC801 (Pin 5)
USB Power SW
Is the voltage 5V?
No
Check the parts and patterns in the path.
Yes
6
IC11 (Pin 4), IC21 (Pin 2)
3.3V Reg. output/1.8V Reg. input
Is the voltage 3.3V?
No
Is IC11 abnormally hot?
No
Replace IC11.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
7
IC881 (Pins 37,47)
FLASH ROM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
8
IC891 (Pins 1,3,9,14,27,43)
SDRAM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
9
IC911 (Pin 14)
5-3 Converter
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
10
IC701 (Pins 3,16,32,43,55,61,78,89,103, 113,125,136,151,158,176,192,201)
NETWORK Media processor IC
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
IC861 (Pins 14, 36, 48)
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
11
IC791 (Pin 1, 40)
iPod Co-Processor
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
12
IC21 (Pin 4)
1.8V Regulator output
Is the voltage 1.8V?
No
Is IC21 abnormally hot?
No
Replace IC21.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
A


A
11
IC701 (Pins 18,38,56,71,86,95,114,128, 144,174,189)
NETWORK Media processor IC
Is the voltage 1.8V?
No
Check the parts and patterns in the path.
Yes
12
IC801(Pin 1)
USB Power SW output
Is the voltage 5V?
No
Is pin4 (CTL) of IC801 High?
No
Yes
Yes
Replace IC801.
No
Is pin15 (CTL) of CN1701 High?
No
Yes
Check the DIGITAL MOTHER Assy.
Check the parts and patterns in the path.
13
CN801(Pin 1)
USB Bus power
Is the voltage 5V?
No
Check the parts and patterns in the path.
Yes
Power supply is OK To Step 3

Step 3:Operation of Network Media processor IC

*Please confirm it with the USB memory connected for the content.


IC701(Pins 203,204)
XIN/XOUT
Does the crystal oscillate at 24.576MHz?
No
Is XRST high?
No
Yes
Yes
XRST must be high during operation. Check the DIGITAL MOTHR Assy.
Check the parts and patterns in the path. Replace X701. etc.
IC861(Pins 46,47)
XIN/XOUT
Does the crystal oscillate at 25.000MHz?
No
Chech the power supply voltage of IC861 again.
Yes
IC701(Pin 81)
PHYCLK
Does 81pin output the oscillation signal of 25MHz?
No
OK, DM850E operates correctly. It can be judged whether DM850E operates correctly though this signal is not connected.
No
DM850E doesn't operates correctly.
It seems that there are following problems.
- F/W is not written correctly in FLASH ROM.
- FLASH ROM is NG.
- SDRAM is NG.

Step 4 : Communication between DM850E and System CPU

The signal shown by following fig are communication line of DM850E and main CPU(IC2001).
Confirm the connection of the signals along these routes.

fig. 1

	CN901	IC911 (5V -> 3V)		IC701
XRST	Pin 12	Pin 12	Pin 11	Pin 190
SPI CS	Pin 21	Pin 2	Pin 3	Pin 143
SPI CLK3	Pin 14	Pin 5	Pin 6	Pin 141
SPI MOSI	Pin 18	Pin 9	Pin 8	Pin 147

fig. 2

	IC701	IC921 (3V -> 5V)		CN901
SPI MISO	Pin 146	Pin 9	Pin 8	Pin 19
SPI REQ3	Pin 100	Pin 5	Pin 6	Pin 20

Step 5 :Communication between DM850E and System CPU

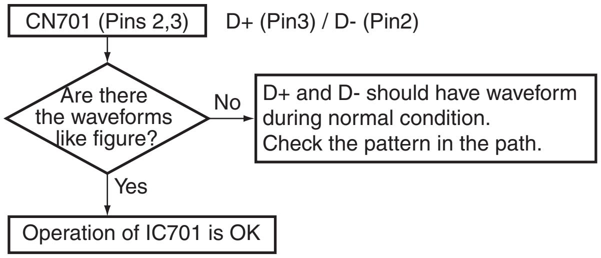
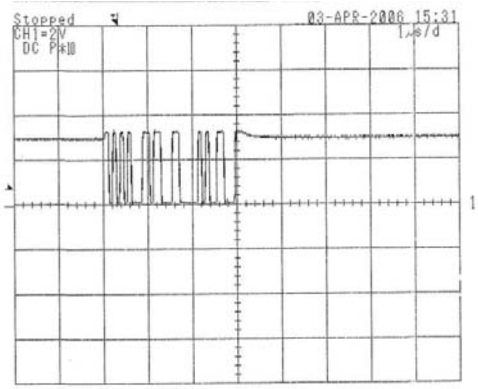
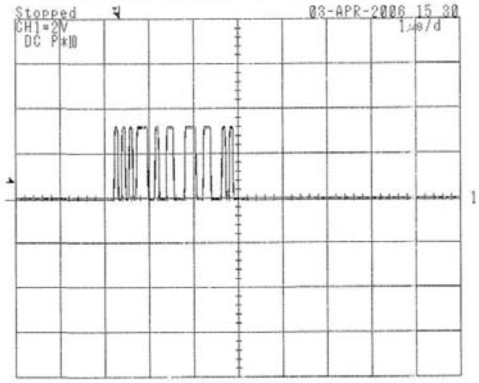

CN701 (Pins 2,3)
D+ (Pin3) / D- (Pin2)
Are there the waveforms like figure?
No
D+ and D- should have waveform during normal condition.
Check the pattern in the path.
Yes
Operation of IC701 is OK

fig. : D+



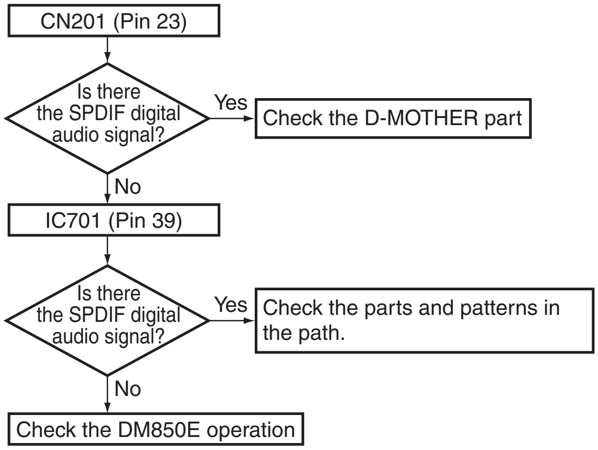
X : 1usec/div, Y : 2V/div

fig. : D-

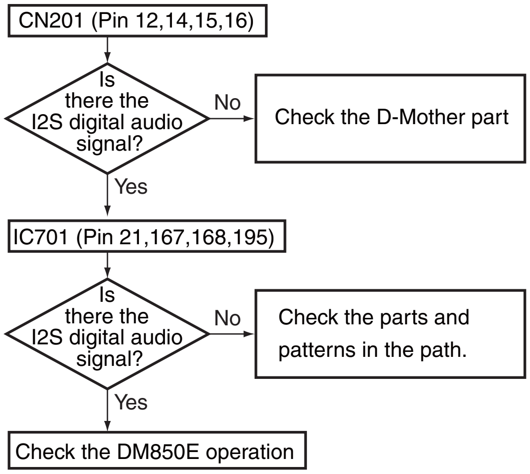


X : 1usec/div, Y : 2V/div

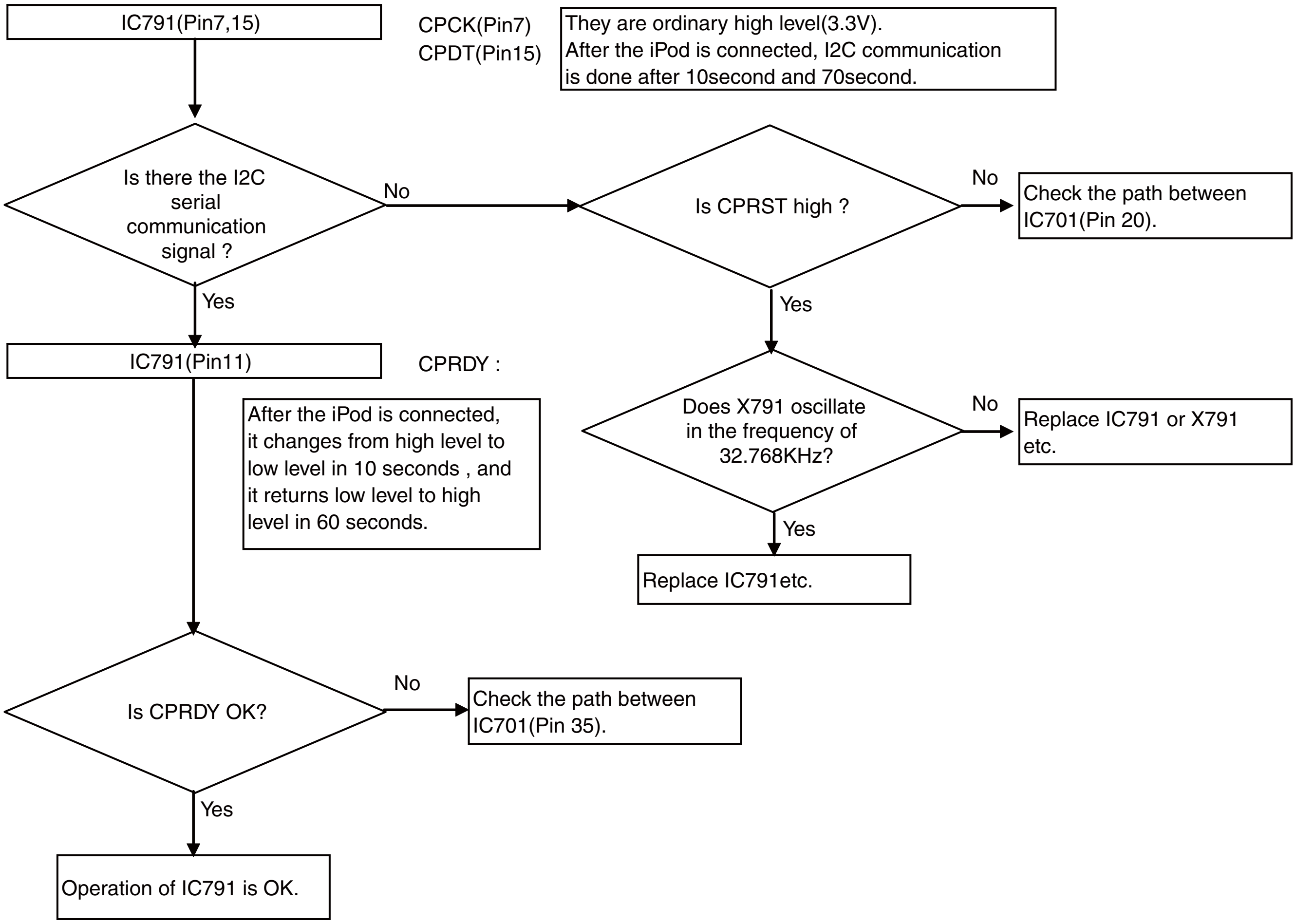
Step 6 : Audio Output


CN201 (Pin 23)
Is there the SPDIF digital audio signal?
Yes
Check the D-MOTHER part
No
IC701 (Pin 39)
Is there the SPDIF digital audio signal?
Yes
Check the parts and patterns in the path.
No
Check the DM850E operation

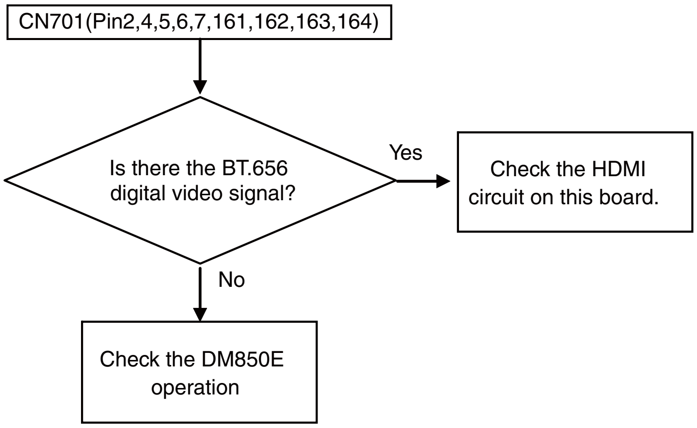
Step 7 : Audio Output (Zone2)


CN201 (Pin 12,14,15,16)
Is there the I2S digital audio signal?
No
Check the D-Mother part
Yes
IC701 (Pin 21,167,168,195)
Is there the I2S digital audio signal?
No
Check the parts and patterns in the path.
Yes
Check the DM850E operation

Step 8 : Communication between DM850E and iPod Co-Processor


IC791(Pin7,15)
CPCK(Pin7)
CPDT(Pin15)
They are ordinary high level(3.3V).
After the iPod is connected, I2C communication is done after 10second and 70second.
Is there the I2C serial communication signal ?
No
Is CPRST high ?
No
Check the path between IC701(Pin 20).
Yes
Yes
IC791(Pin11)
CPRDY :
After the iPod is connected, it changes from high level to low level in 10 seconds , and it returns low level to high level in 60 seconds.
Does X791 oscillate in the frequency of 32.768KHz?
No
Replace IC791 or X791 etc.
Yes
Replace IC791etc.
Is CPRDY OK?
No
Check the path between IC701(Pin 35).
Yes
Operation of IC791 is OK.

Step 9 : Photo Image Output


CN701(Pin2,4,5,6,7,161,162,163,164)
Is there the BT.656 digital video signal?
Yes
Check the HDMI circuit on this board.
No
Check the DM850E operation

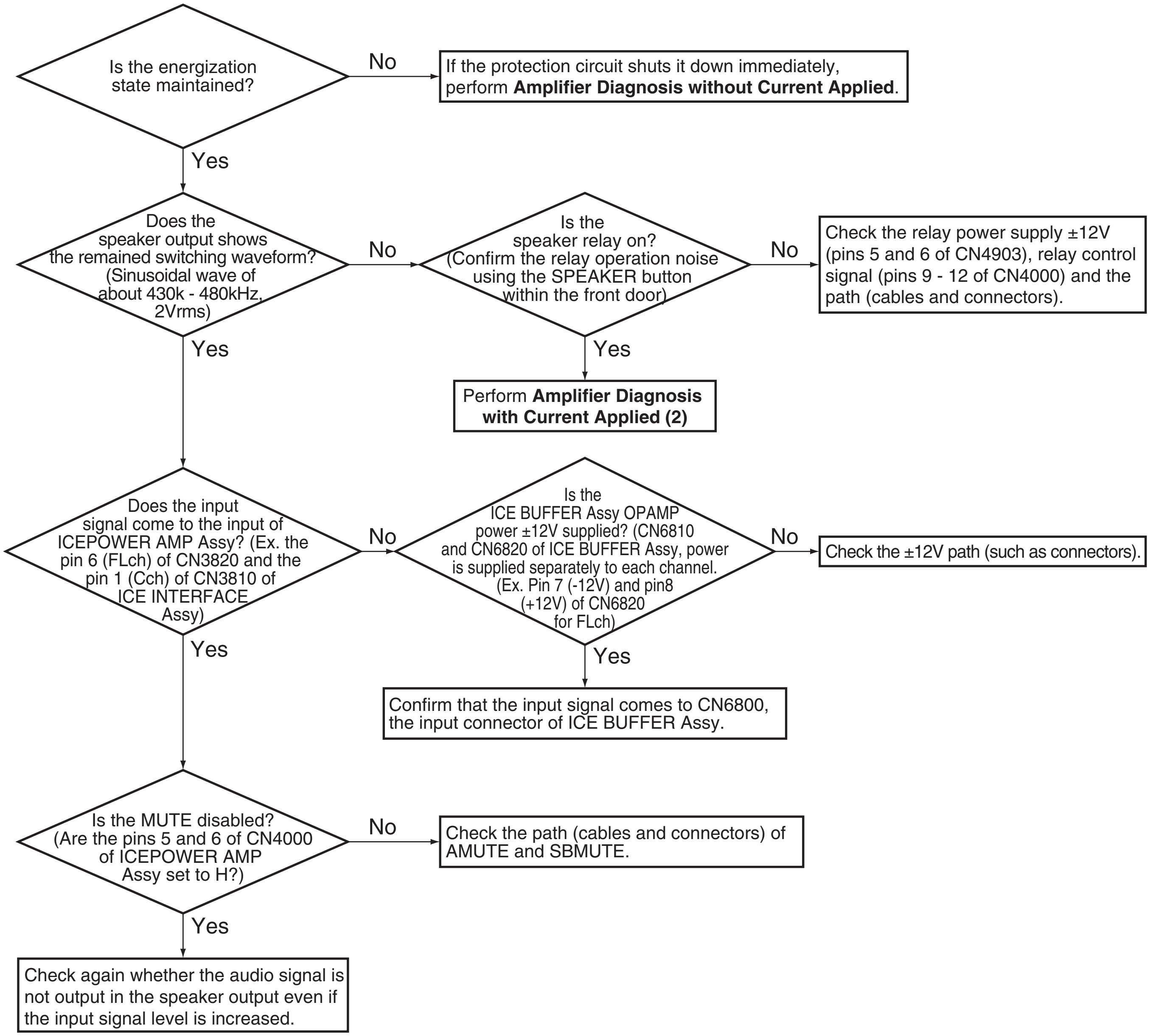
[5] Power Amp Section Troubleshooting

In the speaker output, the sinusoidal wave of about 430k - 480 kHz 2Vrms (when immediately after the current is applied with no signal/no load; the switching frequency varies by the connected load, signal level and the energizing time) is always output.
It is the switching waveform (±64V square wave) in the output stage that has been attenuated through LPF.
If such remained waveform can be observed, it can be assumed that the amplifier is operating normally.

When a signal is input to the amplifier, the output signal of the speaker shows the waveform such that the remained switching waveform is superimposed onto the audio signal. Note that when the input signal level is extremely small, it may not be easy to confirm the audio element since it is buried in the remained switching waveform (approximately 2Vrms).

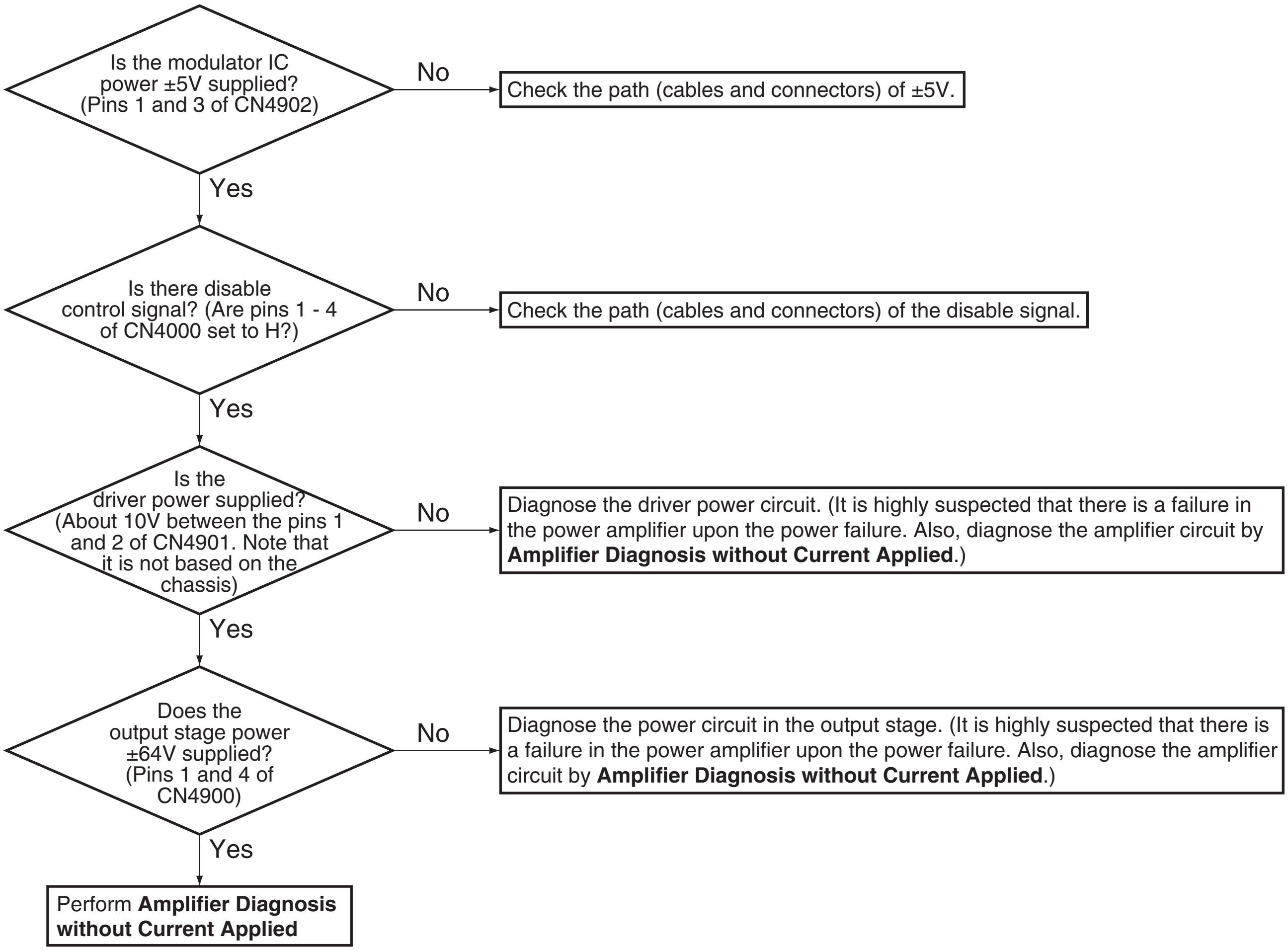
When no sound is produced with a specific function or sound mode, it is not caused by a failure in the power amplifier block. When there is a failure in the power amplifier block, no sound is produced with every function.
It is recommended to set the speaker setting to "LARGE" for all the channels and the function to "MULTI CH IN" when examining the power amplifier.

Amplifier Diagnosis with Current Applied (1)


Is the energization state maintained?
No
If the protection circuit shuts it down immediately, perform **Amplifier Diagnosis without Current Applied**.
Yes
Does the speaker output shows the remained switching waveform? (Sinusoidal wave of about 430k - 480kHz, 2Vrms)
No
Is the speaker relay on? (Confirm the relay operation noise using the SPEAKER button within the front door)
No
Check the relay power supply ±12V (pins 5 and 6 of CN4903), relay control signal (pins 9 - 12 of CN4000) and the path (cables and connectors).
Yes
Perform **Amplifier Diagnosis with Current Applied (2)**
Yes
Does the input signal come to the input of ICEPOWER AMP Assy? (Ex. the pin 6 (FLch) of CN3820 and the pin 1 (Cch) of CN3810 of ICE INTERFACE Assy)
No
Is the ICE BUFFER Assy OPAMP power ±12V supplied? (CN6810 and CN6820 of ICE BUFFER Assy, power is supplied separately to each channel. (Ex. Pin 7 (-12V) and pin8 (+12V) of CN6820 for FLch)
No
Check the ±12V path (such as connectors).
Yes
Confirm that the input signal comes to CN6800, the input connector of ICE BUFFER Assy.
Yes
Is the MUTE disabled? (Are the pins 5 and 6 of CN4000 of ICEPOWER AMP Assy set to H?)
No
Check the path (cables and connectors) of AMUTE and SBMUTE.
Yes
Check again whether the audio signal is not output in the speaker output even if the input signal level is increased.

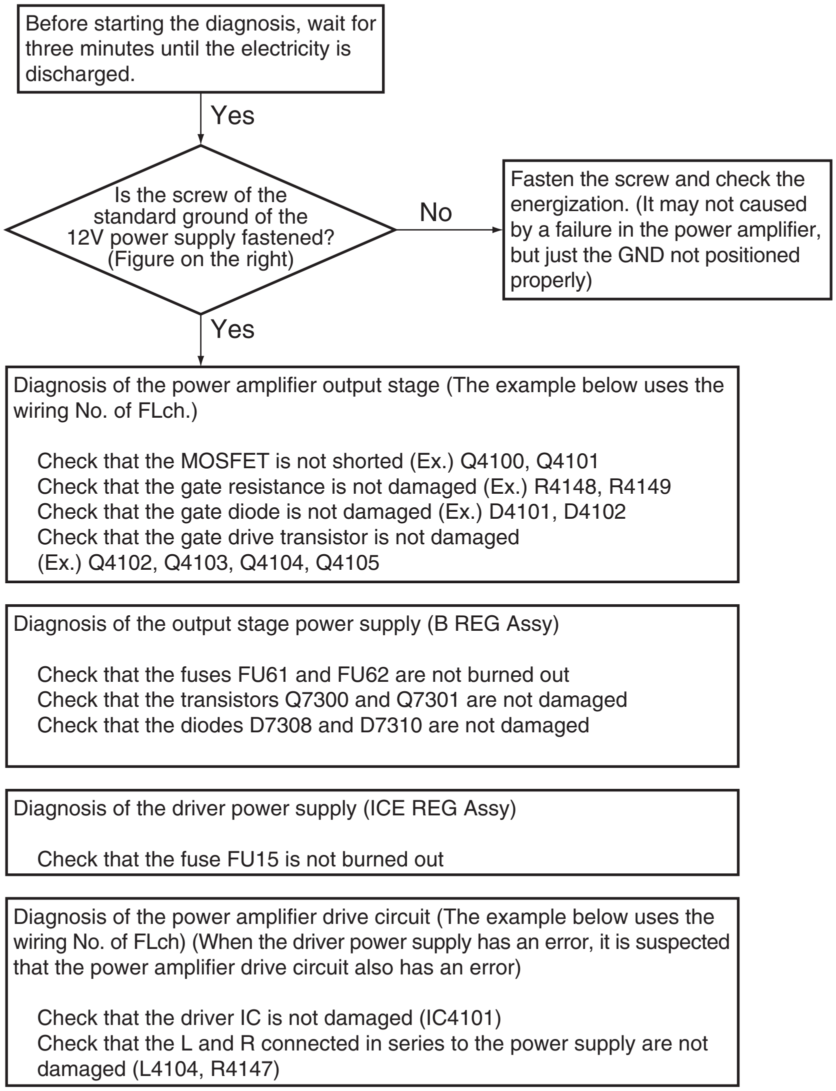
Amplifier Diagnosis with Current Applied (2)

When the remained switching waveform is not observed in the speaker output, the amplifier is not operating.
Here, confirm that the power and signal necessary for the amplifier to operate are supplied.


Is the modulator IC power ±5V supplied? (Pins 1 and 3 of CN4902)
No
Check the path (cables and connectors) of ±5V.
Yes
Is there disable control signal? (Are pins 1 - 4 of CN4000 set to H?)
No
Check the path (cables and connectors) of the disable signal.
Yes
Is the driver power supplied? (About 10V between the pins 1 and 2 of CN4901. Note that it is not based on the chassis)
No
Diagnose the driver power circuit. (It is highly suspected that there is a failure in the power amplifier upon the power failure. Also, diagnose the amplifier circuit by Amplifier Diagnosis without Current Applied.)
Yes
Does the output stage power ±64V supplied? (Pins 1 and 4 of CN4900)
No
Diagnose the power circuit in the output stage. (It is highly suspected that there is a failure in the power amplifier upon the power failure. Also, diagnose the amplifier circuit by Amplifier Diagnosis without Current Applied.)
Yes
Perform Amplifier Diagnosis without Current Applied

Amplifier Diagnosis without Current Applied

The most common symptom of the power amplifier failure is the destruction of the power amplifier output stage or the power amplifier power circuit due to the heavy load, which is, for example, caused by short of the speaker terminal or the use of the non-guaranteed low impedance speaker.
If the protection circuit immediately shuts it down immediately after the current is applied, it is highly likely that it is the above symptom.
The procedure to diagnose/repair without applying current is shown below.



Before starting the diagnosis, wait for three minutes until the electricity is discharged.

Is the screw of the standard ground of the 12V power supply fastened? (Figure on the right)

Fasten the screw and check the energization. (It may not caused by a failure in the power amplifier, but just the GND not positioned properly)

Diagnosis of the power amplifier output stage (The example below uses the wiring No. of FLch.)

Check that the MOSFET is not shorted (Ex.) Q4100, Q4101
Check that the gate resistance is not damaged (Ex.) R4148, R4149
Check that the gate diode is not damaged (Ex.) D4101, D4102
Check that the gate drive transistor is not damaged
(Ex.) Q4102, Q4103, Q4104, Q4105

Diagnosis of the output stage power supply (B REG Assy)

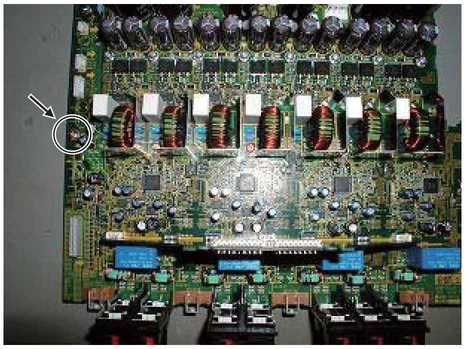
Check that the fuses FU61 and FU62 are not burned out
Check that the transistors Q7300 and Q7301 are not damaged
Check that the diodes D7308 and D7310 are not damaged

Diagnosis of the driver power supply (ICE REG Assy)

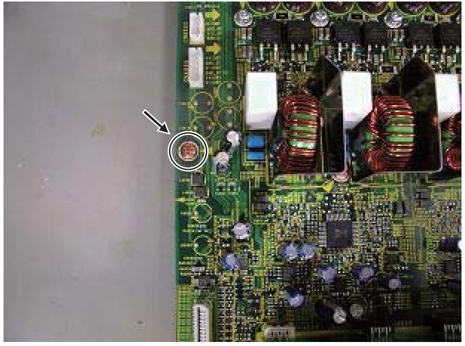
Check that the fuse FU15 is not burned out

Diagnosis of the power amplifier drive circuit (The example below uses the wiring No. of FLch) (When the driver power supply has an error, it is suspected that the power amplifier drive circuit also has an error)

Check that the driver IC is not damaged (IC4101)
Check that the L and R connected in series to the power supply are not damaged (L4104, R4147)



(Closeup)



5.2 CIRCUIT DESCRIPTION

[1] Protection Circuit Process List

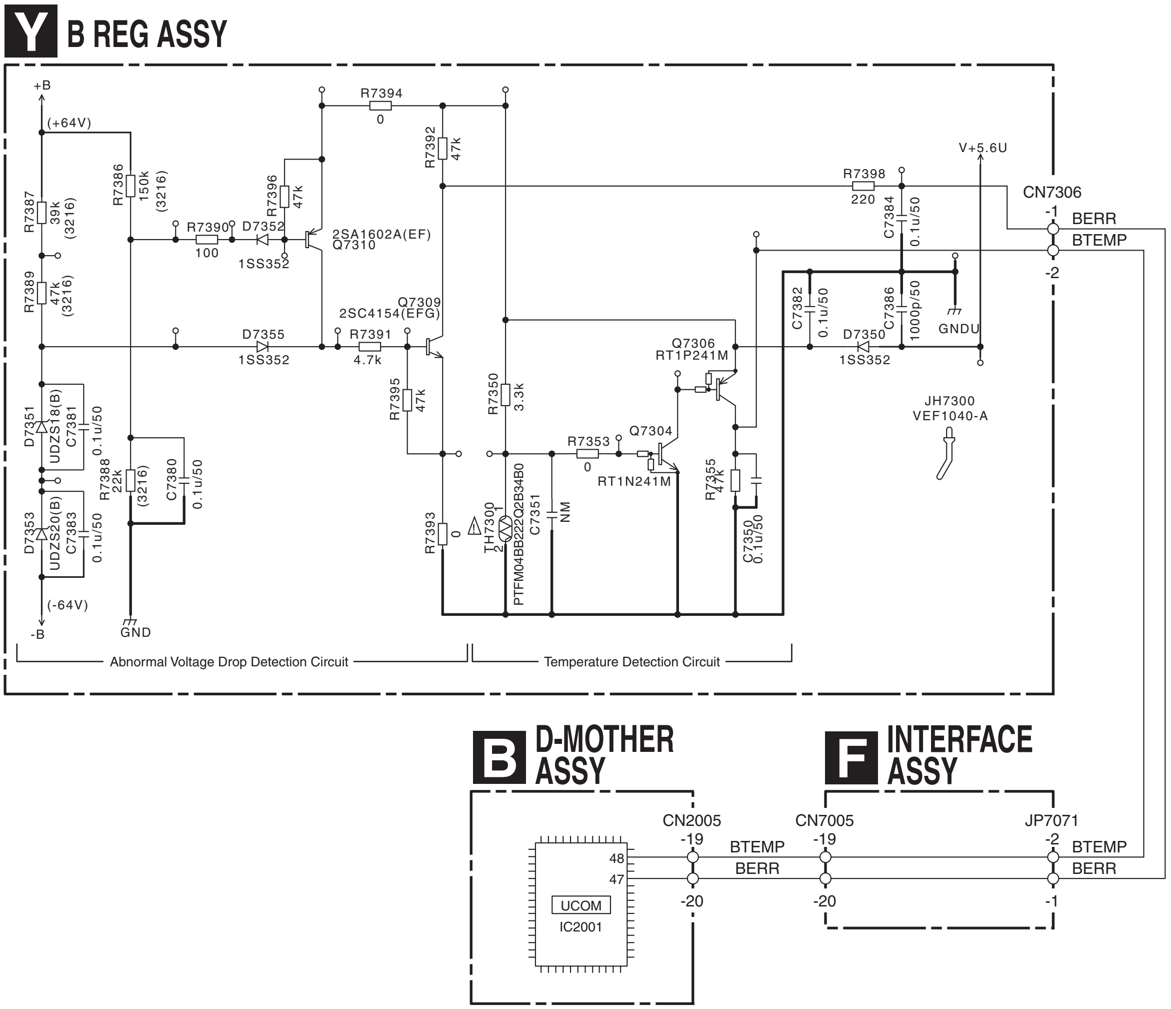
B REG Power Supply

Item	Purpose	Detection Method	Status of Equipment	Warning Indication	Remarks
B REG power supply overheat detection	Detects overheat of transistor(s) in B REG power supply circuit	Detects when posistor detection temperature exceeds 120°C and BTMP port becomes "H". (IC2001 48pin)	Flashes "OVERHEAT" indicator. Shuts down at continuation for more than 3 seconds. LED indicator continues blinking.	"OVERHEAT" and 3 second flashing. Blinks ICE blue LED indicator.	Recoverable by power-on
B REG power supply failure detection	Detect abnormal voltage drop when B REG transistor(s) becomes failure	Detects output voltage of B REG power cuicuit decreases below 38V and BERR port becomes "L". (IC2001 47pin)	Shuts down	Blinks MCACC LED	Unrecoverable

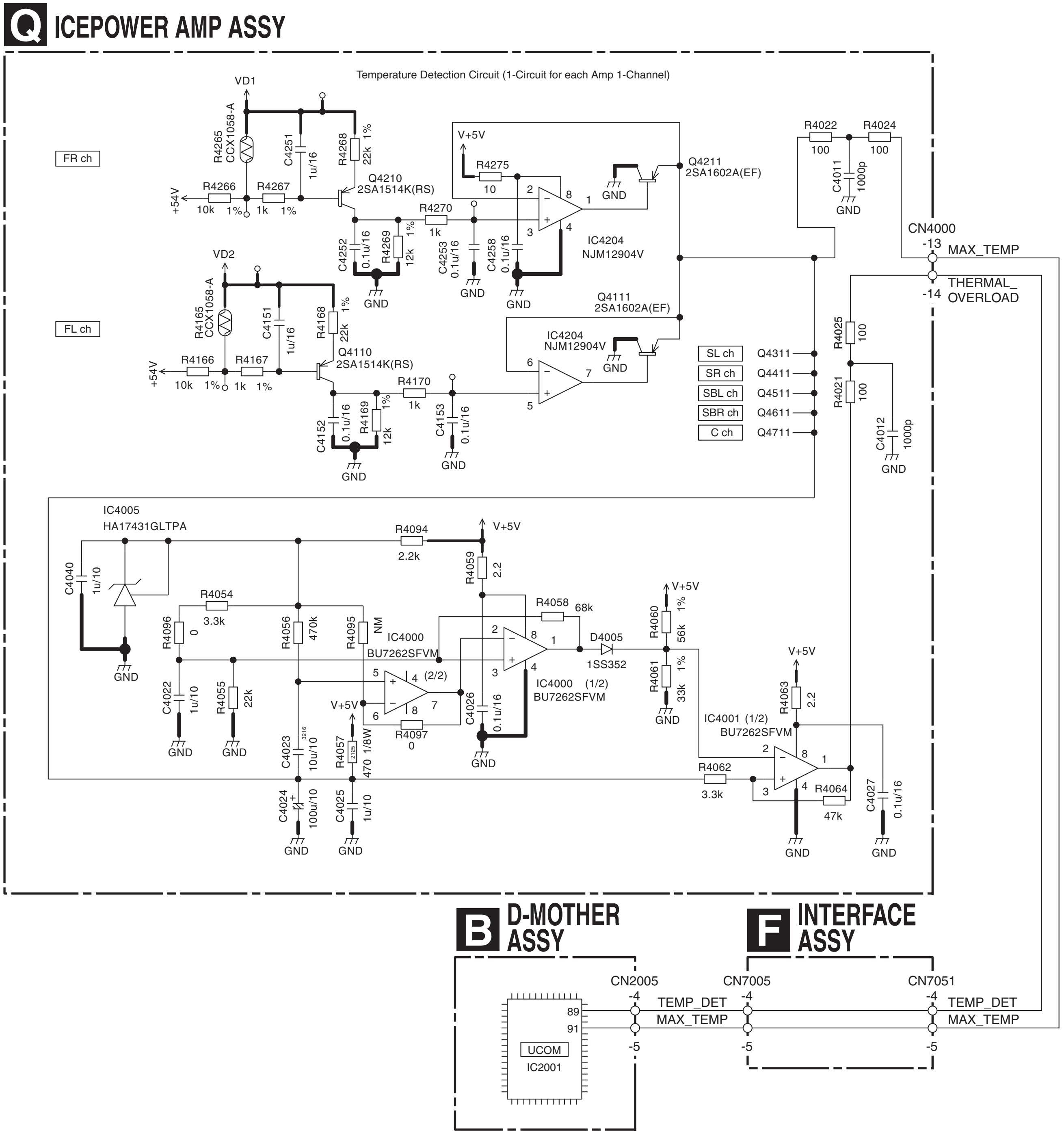
Amplifier Circuit

Item	Purpose	Detection Method	Status of Equipment	Warning Indication	Remarks
Overheat detection	Detects MOS FET temperature of amplifier output stage	Detects when TEMPERR PORT becomes "L" in case of the detecting temperature exceeds 95°C or rapid change by short cuicuit of speaker terminals. (IC2001 89pin)	Shuts down with FL indication of "AMP OVERHEAT". LED indicator continues blinking.	Indicates "AMP OVERHEAT". Blinks ICE blue LED indicator.	Recoverable by power-on
		Detects when MAXTEMP port becomes below 3.3V at NTC Thermistor detect circuit. (IC2001 91pin)	Fan rotates below 3.3V.		
DC detection	Detects DC of amplifier output (After LPF)	Detects when SP output exceeds DC ± 7V and DCERR port becomes "L". (IC2001 90pin)	Let MUTE on, Speater Relay off and shuts down 3 seconds after to blink MCACC LED.	Flashes "AMP ERR"indicator. Blinks MCACC LED	In case of detecting DC abnormality during power-on sequence after detecting DC. Unrecoverable
			Let MUTE on, Speater Relay off and shuts down 3 seconds after to blink ICE blue indicator.	Flashes "AMP ERR"indicator. Blinks ICE blue LED indicator.	In case of detecting DC abnormality during normal operation. Recoverable by power-on after 1 minute.
Fan abnormality detection	Detects a Fan not rotating by loose connector or Fan lock when controling the Fan rotation	Detects when FANDET port becomes "L". (IC2001 88pin)	Shuts down when abnormality continues for more than 3 seconds.	Flashes "FAN STOP"indicator. Blinks Digital Video Scaler LED	Recoverable by power-on
Zobel detection	Protects overcurrent by Zobel Resistance when high power output of higher frequency continued	Detects OLERR port becomes "L". (IC2001 17pin)	Shuts down	Blinks PHASE CONTROL LED	Recoverable by power-on
Overcurrent detection	Protects overcurrent of MOS FET in output stage when overcurrent flows at the output stage	Detects OLERR port becomes "L". (IC2001 17pin)	Shuts down	Blinks PHASE CONTROL LED	Recoverable by power-on
Low Voltage detection (Amplifier power supply)	Detects low voltage when amplifier power supply voltage (normally ± 64V) becomes below ± 42V	Detects OLERR port becomes "L". (IC2001 17pin) AMP_Overload DET	Shuts down	Blinks PHASE CONTROL LED	Recoverable by power-on
Low Voltagae detection (Modulator IC)	Detects low voltage of modulator IC power supply (normally ± 5V) becomes below ± 2 - 3V	No micro-computer detection exists.	No micro-computer control but modulator IC stops by itself.		Recoverable by power-on

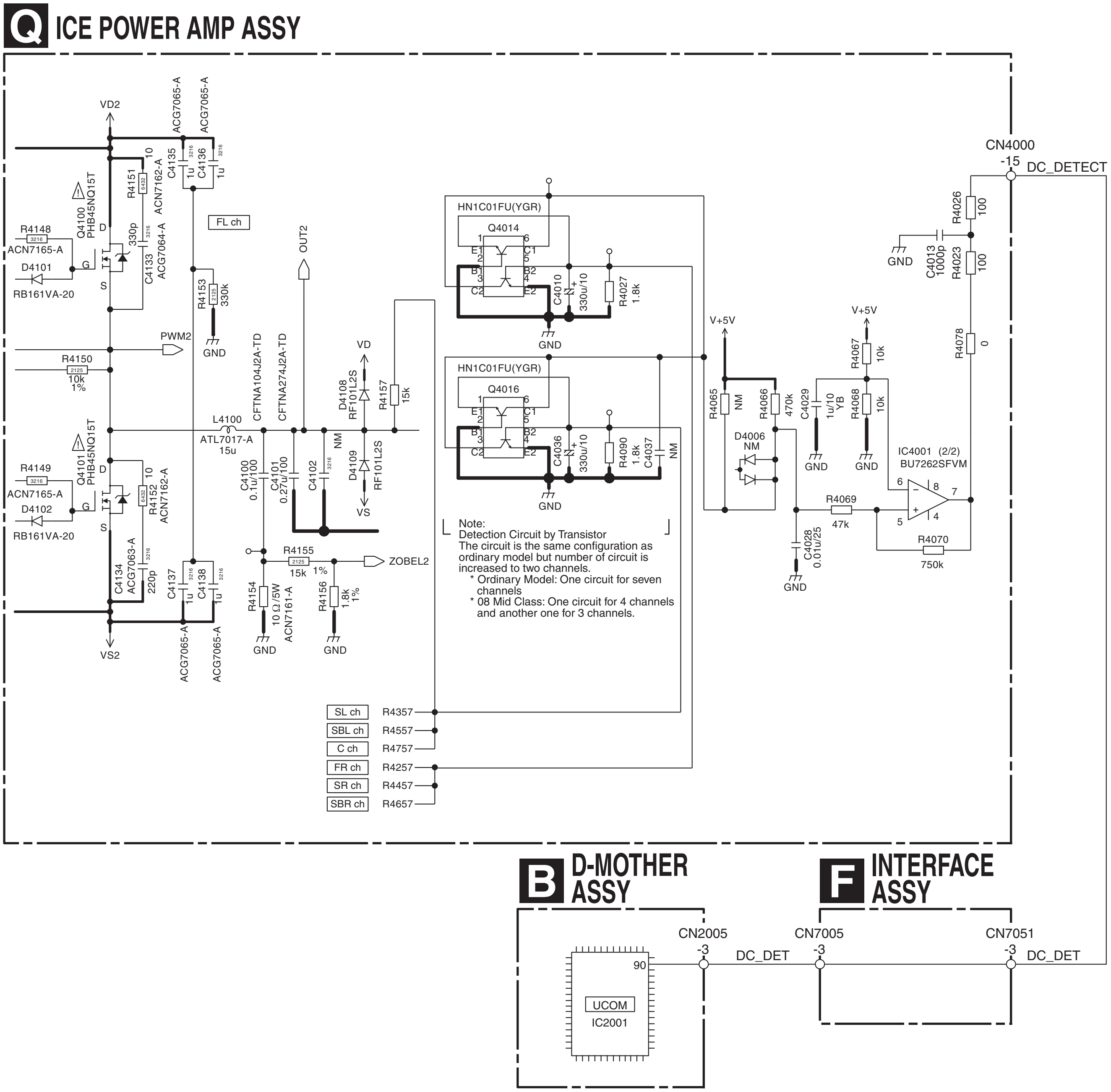
B REG Power Supply Overheat Detection
B REG Power Supply Failure Detection


Y B REG ASSY
+B
(+64V)
R7387
39k
(3216)
R7389
47k
(3216)
R7386
150k
(3216)
R7390
100
D7352
1SS352
R7396
47k
2SA1602A(EF)
Q7310
R7394
0
R7392
47k
Q7309
2SC4154(EFG)
D7355
1SS352
R7391
4.7k
R7395
47k
D7351
UDZS18(B)
C7381
0.1u/50
R7388
22k
(3216)
C7380
0.1u/50
D7353
UDZS20(B)
C7383
0.1u/50
(-64V)
-B
GND
R7393
0
TH7300
PTFM04BB222Q2B34B0
C7351
NM
R7350
3.3k
R7353
0
Q7304
RT1N241M
Q7306
RT1P241M
R7355
47k
C7350
0.1u/50
C7382
0.1u/50
D7350
1SS352
R7398
220
C7384
0.1u/50
C7386
1000p/50
GNDU
V+5.6U
CN7306
-1
BERR
BTEMP
-2
JH7300
VEF1040-A
Abnormal Voltage Drop Detection Circuit
Temperature Detection Circuit
B D-MOTHER ASSY
F INTERFACE ASSY
CN2005
-19
-20
48
47
UCOM
IC2001
BTEMP
BERR
CN7005
-19
-20
JP7071
-2
-1
BTEMP
BERR

Overheat Detection

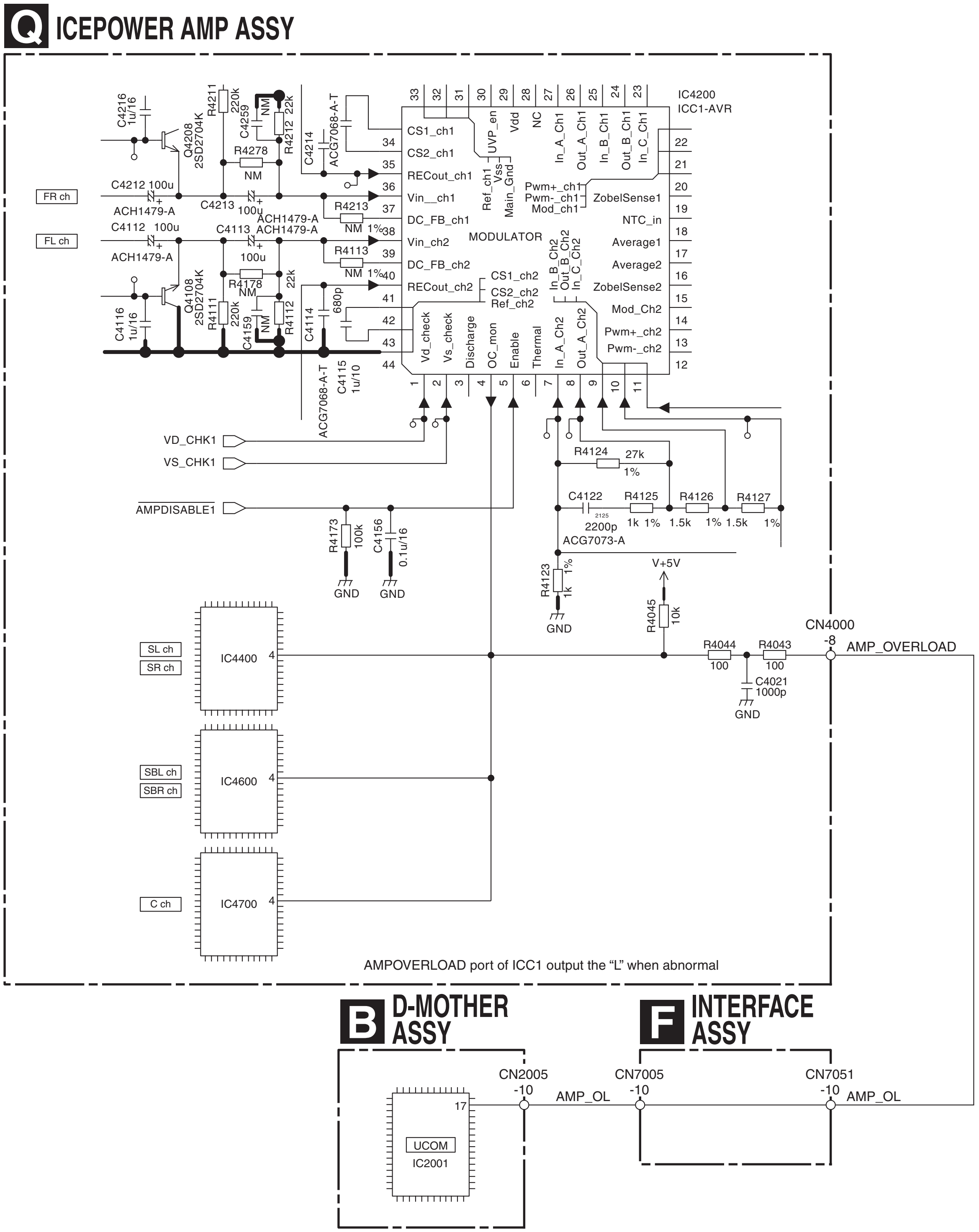

Q ICEPOWER AMP ASSY
Temperature Detection Circuit (1-Circuit for each Amp 1-Channel)
FR ch
FL ch
VD1
VD2
R4265 CCX1058-A
R4165 CCX1058-A
C4251 1u/16
C4151 1u/16
R4268 22k 1%
R4168 22k 1%
+54V
R4266 10k 1%
R4267 1k 1%
R4166 10k 1%
R4167 1k 1%
Q4210 2SA1514K(RS)
Q4110 2SA1514K(RS)
C4252 0.1u/16
R4269 12k 1%
C4152 0.1u/16
R4169 12k 1%
R4270 1k
R4170 1k
C4253 0.1u/16
C4258 0.1u/16
C4153 0.1u/16
V+5V
R4275 10
IC4204 NJM12904V
Q4211 2SA1602A(EF)
Q4111 2SA1602A(EF)
GND
R4022 100
R4024 100
C4011 1000p
CN4000
-13 MAX_TEMP
-14 THERMAL_ OVERLOAD
R4025 100
R4021 100
C4012 1000p
SL ch Q4311
SR ch Q4411
SBL ch Q4511
SBR ch Q4611
C ch Q4711
IC4005 HA17431GLTPA
C4040 1u/10
R4094 2.2k
R4059 2.2
R4054 3.3k
R4096 0
R4056 470k
R4095 NM
IC4000 BU7262SFVM (2/2)
IC4000 (1/2) BU7262SFVM
R4058 68k
D4005 1SS352
R4060 56k 1%
R4061 33k 1%
C4022 1u/10
R4055 22k
R4097 0
C4026 0.1u/16
C4023 10u/10 3216
R4057 470 1/8W 2125
C4024 100u/10
C4025 1u/10
IC4001 (1/2) BU7262SFVM
R4063 2.2
R4062 3.3k
R4064 47k
C4027 0.1u/16
B D-MOTHER ASSY
F INTERFACE ASSY
CN2005
CN7005
CN7051
-4 TEMP_DET
MAX_TEMP
-5
89
91
UCOM
IC2001

DC Detection


Q ICE POWER AMP ASSY
VD2
ACG7065-A
ACG7065-A
C4135 1u
C4136 1u
R4151 10 ACN7162-A
Q4100 PHB45NQ15T
D G S
330p C4133 ACG7064-A
R4148 ACN7165-A
D4101 RB161VA-20
FL ch
R4153 330k
GND
OUT2
PWM2
R4150 10k 1%
L4100 ATL7017-A 15u
CFTNA104J2A-TD
CFTNA274J2A-TD
C4100 0.1u/100
C4101 0.27u/100
C4102
NM
VD
D4108 RF101L2S
D4109 RF101L2S
VS
R4157 15k
Q4101 PHB45NQ15T
R4149 ACN7165-A
D4102 RB161VA-20
R4152 10 ACN7162-A
C4134 ACG7063-A 220p
C4137 1u
C4138 1u
R4155 15k 1%
ZOBEL2
R4154 10 Ω /5W ACN7161-A
R4156 1.8k 1%
GND
GND
VS2
ACG7065-A
ACG7065-A
HN1C01FU(YGR)
Q4014
E1 B1 C2 C1 B2 E2
1 2 3 4 5 6
C4010 330u/10
R4027 1.8k
GND
HN1C01FU(YGR)
Q4016
C4036 330u/10
R4090 1.8k
C4037 NM
GND
V+5V
R4065 NM
R4066 470k
D4006 NM
C4028 0.01u/25
GND
V+5V
R4067 10k
C4029 1u/10 YB
R4068 10k
GND
GND
IC4001 (2/2) BU7262SFVM
R4069 47k
R4070 750k
6 5 8 7 4
CN4000 -15 DC_DETECT
R4026 100
C4013 1000p
R4023 100
GND
R4078 0
SL ch R4357
SBL ch R4557
C ch R4757
FR ch R4257
SR ch R4457
SBR ch R4657
B D-MOTHER ASSY
F INTERFACE ASSY
CN2005 -3
CN7005 -3
CN7051 -3
DC_DET
DC_DET
90
UCOM IC2001

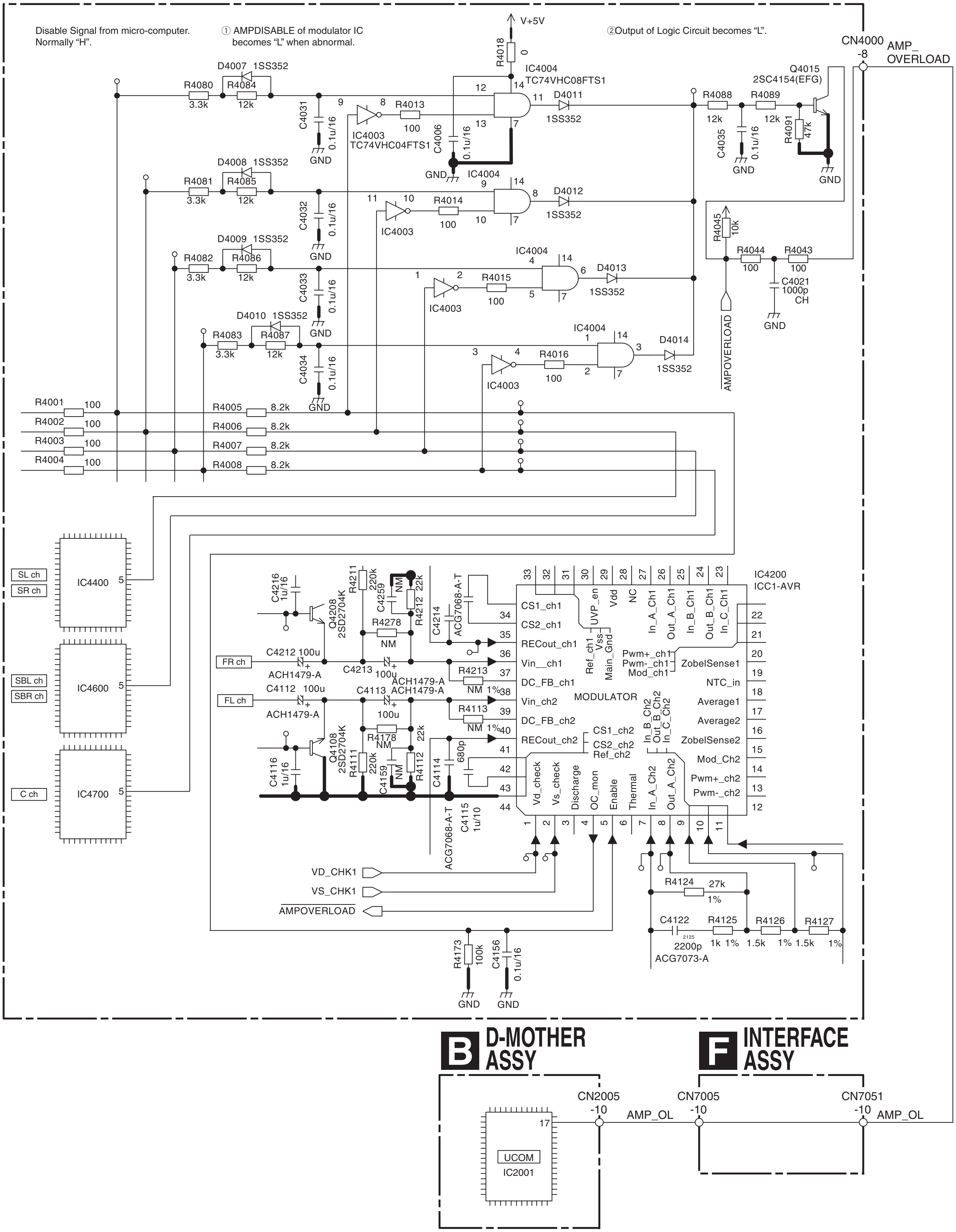
Note:
Detection Circuit by Transistor
The circuit is the same configuration as ordinary model but number of circuit is increased to two channels.
* Ordinary Model: One circuit for seven channels
* 08 Mid Class: One circuit for 4 channels and another one for 3 channels.

Zobel Detection
Over Current Detection of MOS FET in Output Stage


Q ICEPOWER AMP ASSY
IC4200
ICC1-AVR
MODULATOR
CS1_ch1
CS2_ch1
RECout_ch1
Vin__ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
CS1_ch2
CS2_ch2
Ref_ch2
Ref_ch1
Vss
Main_Gnd
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Pwm+_ch1
Pwm-_ch1
Mod_ch1
ZobelSense1
NTC_in
Average1
Average2
ZobelSense2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
In_B_Ch2
Out_B_Ch2
In_C_Ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
FR ch
FL ch
C4216 1u/16
Q4208 2SD2704K
R4211 220k
C4259
NM
R4212 22k
R4278 NM
C4214
ACG7068-A-T
C4212 100u
ACH1479-A
C4213 100u
R4213 NM 1%
C4112 100u
C4113 100u
R4113 NM 1%
R4178 NM
Q4108 2SD2704K
R4111 220k
C4159 NM
R4112 22k
C4114 680p
C4115 1u/10
C4116 1u/16
VD_CHK1
VS_CHK1
AMPDISABLE1
R4173 100k
C4156 0.1u/16
GND
R4124 27k 1%
C4122 2200p ACG7073-A
R4125 1k 1%
R4126 1.5k 1%
R4127 1.5k 1%
R4123 1k 1%
V+5V
R4045 10k
R4044 100
R4043 100
C4021 1000p
CN4000 -8
AMP_OVERLOAD
SL ch
SR ch
IC4400
SBL ch
SBR ch
IC4600
C ch
IC4700
AMPOVERLOAD port of ICC1 output the "L" when abnormal
B D-MOTHER ASSY
UCOM
IC2001
CN2005 -10
AMP_OL
F INTERFACE ASSY
CN7005 -10
CN7051 -10
AMP_OL

Low Voltage Detection for Amplifier Power Supply

Q ICEPOWER AMP ASSY


Disable Signal from micro-computer.
Normally "H".
① AMPDISABLE of modulator IC becomes "L" when abnormal.
②Output of Logic Circuit becomes "L".
V+5V
R4018 0
IC4004 TC74VHC08FTS1
CN4000 -8 AMP_ OVERLOAD
Q4015 2SC4154(EFG)
R4080 3.3k
R4084 12k
D4007 1SS352
C4031 0.1u/16
GND
IC4003 TC74VHC04FTS1
R4013 100
C4006 0.1u/16
D4011 1SS352
R4088 12k
R4089 12k
C4035 0.1u/16
R4091 47k
R4081 3.3k
R4085 12k
D4008 1SS352
C4032 0.1u/16
R4014 100
D4012 1SS352
R4045 10k
R4044 100
R4043 100
C4021 1000p CH
R4082 3.3k
R4086 12k
D4009 1SS352
C4033 0.1u/16
R4015 100
D4013 1SS352
AMPOVERLOAD
R4083 3.3k
R4087 12k
D4010 1SS352
C4034 0.1u/16
R4016 100
D4014 1SS352
R4001 100
R4002 100
R4003 100
R4004 100
R4005 8.2k
R4006 8.2k
R4007 8.2k
R4008 8.2k
SL ch
SR ch
IC4400
SBL ch
SBR ch
IC4600
C ch
IC4700
FR ch
FL ch
C4216 1u/16
Q4208 2SD2704K
R4211 220k
C4259 NM
R4212 22k
R4278 NM
C4214 ACG7068-A-T
C4212 100u ACH1479-A
C4213 100u ACH1479-A
R4213 NM 1%
C4112 100u ACH1479-A
C4113 ACH1479-A 100u
R4113 NM 1%
R4178 NM
Q4108 2SD2704K
R4111 220k
C4159 NM
R4112 22k
C4116 1u/16
C4114 680p
ACG7068-A-T
C4115 1u/10
IC4200 ICC1-AVR
MODULATOR
CS1_ch1
CS2_ch1
RECout_ch1
Vin__ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Ref_ch1
Vss
Main_Gnd
Pwm+_ch1
Pwm-_ch1
Mod_ch1
ZobelSense1
NTC_in
Average1
Average2
ZobelSense2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
CS1_ch2
CS2_ch2
Ref_ch2
In_B_Ch2
Out_B_Ch2
In_C_Ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
VD_CHK1
VS_CHK1
AMPOVERLOAD
R4124 27k 1%
C4122 2200p ACG7073-A
R4125 1k 1%
R4126 1.5k 1%
R4127 1.5k 1%
R4173 100k
C4156 0.1u/16
GND
B D-MOTHER ASSY
UCOM
IC2001
17
CN2005 -10
AMP_OL
F INTERFACE ASSY
CN7005 -10
CN7051 -10
AMP_OL

[2] Error Indications When an Abnormality in The Amplifier System Is Detected

[Purpose]

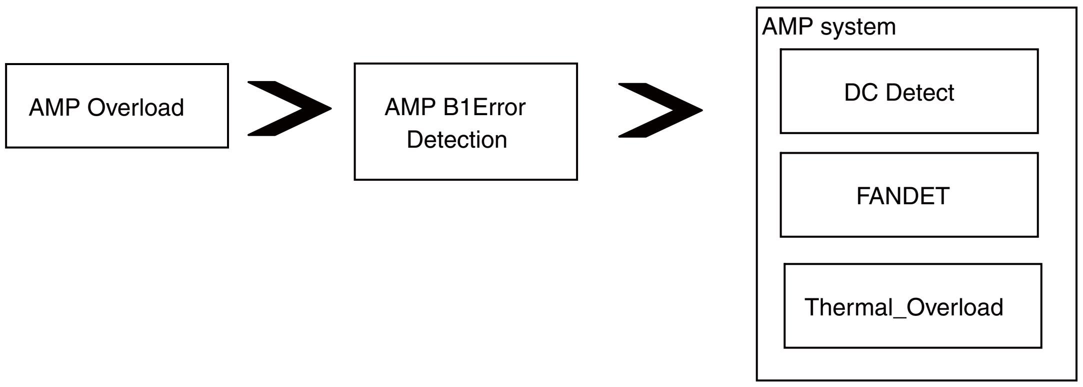
Errors upon detection of abnormalities in the amp system are indicated.

[Error indications]

	FL Display	LED flashes	Status	Timing (sec.)	Remarks
(1)	AMP ERR	ICE Blue LED	When the AMP DC is detected during normal operation.	FL flashes 3 times. LED flashes after the power off.	
		MCACC LED	When the AMP DC is detected during power-on sequence after the DC output was once detected.	FL flashes 3 times. LED flashes after the power off.	
(2)	NA	PHASE CONTROL	When an abnormality of electric current of output stage is detected.	LED flashes after the power off.	
(3)	NA	PHASE CONTROL	When an abnormality of overheat of output stage is detected.	LED flashes after the power off.	
(4)	FAN STOP	VIDEO SCALER	When an abnormality is detected in the fan for the AMP.	FL flashes 3 times. LED flashes after the power off.	
(5)	OVERHEAT	ICE Blue LED	When an abnormality of overheat is detected in the power supply B REG circuit.	FL flashes 3 times. LED flashes after the power off.	Abnormality detection in the power supply B REG circuit
(6)	NA	MCACC LED	When an abnormality is detected in the ouput voltage of the power supply B REG circuit.	LED flashes after the power off.	
(7)	12V TRG ERR	NA	When the 12V trigger circuit is short-circuited.	Flashes	
(8)	USB ERROR1	NA	When the overload USB device (over500 mA) is connected.	Flashes	
(9)	HDCP ERROR	NA	When an HDCP ERROR is detected.	Flashes 5 seconds	Warning indication for HDMI Simplay
(10)	NOT SUPPORT	NA	When the monitor outputs a non supported video format.	Flashes 5 seconds	
(11)	HDMI NG	NA	When an error is detected during communication with the HDMI micro-computer.	Flashes	Warning indication for microcomputer commnunication
(12)	DSP NG	NA	When an error is detected during communication with the DSP micro-computer.	Flashes	

[Detection and display priority]

In principle, the abnormality is preferentially detected as the following order.



[Descriptions]

(1)	AMP ERR	In Normal Operation mode, if a failure in the amp block or high DC output is detected, "AMP ERR" appears and starts flashing, and the shutdown process starts. The power is shut off, and the ICE Blue LED starts flashing. To restore the previous status 1 minutes or more after a shutdown, just turn the unit back on.
		If a failure in the amp block or high DC output is detected during a power-on sequence after high DC output was once detected, "AMP ERR" appears and starts flashing, and the shutdown process starts. The power is shut off, and the MCACC LED starts flashing. To restore the previous status, follow the procedure described in "How to Enter Release Mode" below then turn the unit back on. If the unit shuts off again, the AMP block may be in failure.
(2)	Overcurrent detection	Upon detection of overcurrent in the MOSFET at the amp output stage, the unit power off immediately, and the PHASE CONTROL LED starts flashing. The previous stage will be restored when the unit is turned back on.
(3)	Overheat detection	If abnormality temperature is detected in the MOSFET at the amp output stage, the unit power off immediately, and the PHASE CONTROL LED starts flashing. To restore the previous status, turn the unit back on.
(4)	FAN STOP	If abnormality is detected in the fan for the AMP, "FAN STOP" appears and starts flashing, and the shutdown process starts. The power is shut off. The VIDEO SCALER LED starts flashing. To restore the previous status, turn the unit back on.
(5)	OVERHEAT	If abnormality temperature is detected in the power supply B REG circuit, the unit power off immediately, and the ICE Blue LED starts flashing. To restore the previous status, turn the unit back on.
(6)	Failure in the power supply B REG circuit	If abnormality voltage is detected in the power supply B REG circuit, the unit power off immediately, and the MCACC LED starts flashing. To restore the previous status, follow the procedure described in "How to Enter Release Mode" below then turn the unit back on. If the unit shuts off again, the AMP block may be in failure.
(7)	12V TRG ERR	The 12V trigger circuit is short-circuited, and a overcurrent is generated.
(8)	USB ERROR1	The connected USB device is overload.
(9)	HDCP ERROR	The monitor does not support HDCP type or is in standby mode.
(10)	NOT SUPPORT	When an input analog signal is converted and output as an HDMI signal (via the scaler), the output signal is of a resolution not supported by the connected monitor.
(11)	HDMI NG	There is no response from the HDMI microcomputer.
(12)	DSP NG	There is no response from the DSP microcomputer.

[How to Enter Release Mode]

During Standby mode, simultaneously press and hold the " ⬇ (DOWN)" and "ZONE2 ON/OFF" keys for 2 seconds.

6. SERVICE MODE

6.1 TEST MODE

The Service mode has three functional blocks (VERSION block, PROTECT block and DOWNLOAD block).

[1] How to Enter The Service Mode

1. Turn off MULTI-ZONE. Lower MASTER VOLUME to the minimum (---dB) and turn off the power.
2. After the power-off, press and hold down both the "ENTER" key and the "MULTI-ZONE ON/OFF" key for approximately five seconds.

[2] How to Exit The Service Mode

Turning off the power or pressing the RETURN key returns to the normal mode.

[3] Mode Transition Methods For Each of The VERSION Block, PROTECT Block and DOWNLOAD Block

*If no key is pressed within 10 seconds, the Service mode returns to the normal mode.

Key operation	FL display
VERSION block 1/4 Display MAIN / EVENT microcomputer.	M1.000 E1.000
[→] [←]	
PROTECT block 1/11 Display number of times DC is detected.	DC : 000
[→] [←]	
DOWNLOAD block 1/7 Display MAIN computer DOWNLOAD.	MAIN DL[START]
[→] [←]	
Return to VERSION block 1/4.	

1) VERSION block

This block displays version information of various microcomputers and DSP firmware.
*If no key is pressed within 10 seconds, the Service mode returns to the normal mode.

Key operation	FL display	Explanation on displayed versions
Test mode ON		
↓		
VERSION block 1/4 MAIN/EVENT microcomputer	M1.000 E1.000	M * . *** : MAIN microcomputer E * . *** : EVENT microcomputer
[↓] [↑]		
VERSION block 2/4 DISPLAY (EMMA) microcomputer	DISP 1.000	DISP * . *** : DISPLAY microcomputer
[↓] [↑]		
VERSION block 3/4 DSP/HDMI microcomputer	D1.000 H1.000	D * . *** : DSP microcomputer H * . *** : HDMI microcomputer
[↓] [↑]		
VERSION block 4/4 1stDSP/2ndDSP firmware	f1.000 s1.000	f * . *** : 1st DSP firmware s* . *** : 2nd DSP firmware
[↓] [↑]		
To PROTECT block		

2) PROTECT block

This block displays number of times protection processing is detected.
*If no key is pressed within 10 seconds, the Service mode returns to the normal mode.

Key operation	FL display
PROTECT block 1/11 Display number of times DC is detected.	DC : 000
[↓] [↑]	
PROTECT block 2/11 Display number of times OVERLOAD is detected.	OVER: 010
[↓] [↑]	
PROTECT block 3/11 Display number of times COMBINATION is detected. (Detects DC and OVERLOAD simultaneously)	CON : 002
[↓] [↑]	
PROTECT block 4/11 Displays number of times FAN error is detected.	FAN : 002
[↓] [↑]	
PROTECT block 5/11 Display number of times overheat is detected.	TEMP1: 255
[↓] [↑]	
PROTECT block 6/11 Display number of times abnormal temperature is detected.	TEMP2: 255
[↓] [↑]	
PROTECT block 7/11 Displays number of times abnormal temperature at PowerAmp supply is detected.	**BTMP: 126**
[↓] [↑]	
PROTECT block 8/11 Display number of times defect at PowerAmp supply is detected.	**BERR: 125**
[↓] [↑]	

Key operation	FL display
PROTECT block 9/11 Resetting the number of times error is detected	RESET ◀ HOLD ▶
[↓] [↑]	
PROTECT block 10/11 Display accumulated time & RESET.	12345h20m◀HLD▶
[↓] [↑]	
PROTECT block 11/11 The Timer of Exception "Set Stream Path" command on CEC.	EX.SSP◀1500ms▶
[↓] [↑]	
To DOWNLOAD block	

Resetting the number of times error is detected

Key operation	FL display
[←][→]	RESET ◀CLEAR?▶
[ENTER]	RESET [RESET]
↓ To normal mode	

Resetting the accumulated time

Key operation	FL display
[←][→]	12345h20m◀CL ?▶
[ENTER]	0h 0m◀RST▶
↓ To normal mode	

Setting of the Timer of Exception "Set Stream Path" command on CEC.

Key operation	FL display
[←][→]	EX.SSP◀ 600ms▶
↓ To normal mode	

3) DOWNLOAD block

This block enters the rewriting mode of various microcomputers and DSP firmware.

Key operation	FL display
DOWNLOAD block 1/7 MAIN computer DOWNLOAD	MAIN DL[START]
[↓] [↑]	
DOWNLOAD block 2/7 EVENT computer DOWNLOAD	EVNT DL[START]
[↓] [↑]	
DOWNLOAD block 3/7 DISP computer DOWNLOAD	DISP DL[START]
[↓] [↑]	
DOWNLOAD block 4/7 DSP computer DOWNLOAD	DSPM DL[START]
[↓] [↑]	
DOWNLOAD block 5/7 HDMI computer DOWNLOAD	HDMI DL[START]
[↓] [↑]	
DOWNLOAD block 6/7 1stDSP FIRM DOWNLOAD	DSP1 DL[START]
[↓] [↑]	
DOWNLOAD block 7/7 2ndDSP FIRM DOWNLOAD	DSP2 DL[START]
[↓] [↑]	
To VERSION block	

7. DISASSEMBLY

Note 1: Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

Note 2: For performing the diagnosis shown below, the following jigs for service is required:

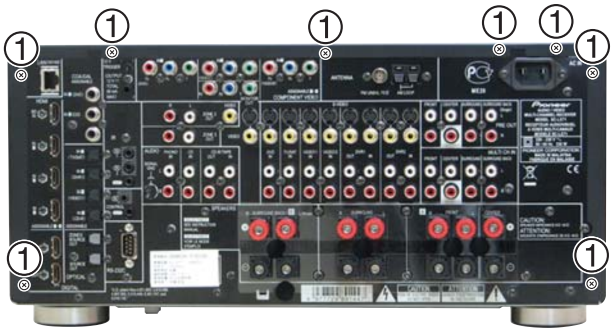
- 27P FFC (GGD1588)
- 19P FFC (GGD1589) x2
- 21P FFC (GGD1590)
- 16P FFC (GGD1591)
- 30P+13P board to board extension jig cable (GGD1592)
- 17P+19P board to board extension jig cable (GGD1593)
- 5P PH HOUSING ASSY (GGD1594) x3

Note 3: Before starting the diagnosis, wait for three minutes until the electricity of the unit is discharged.

1. Disassembly

1 Bonnet

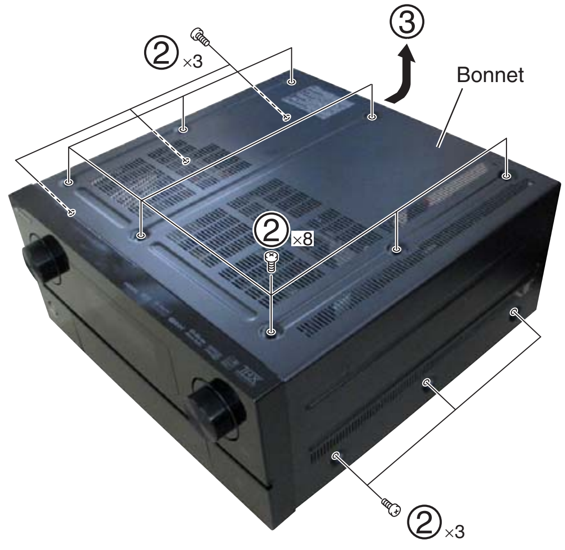
① Remove the eight screws.



● **Rear view**

② Remove the fourteen screws.

③ Remove the Bonnet.



2 Rear Panel

① Remove the two screws.

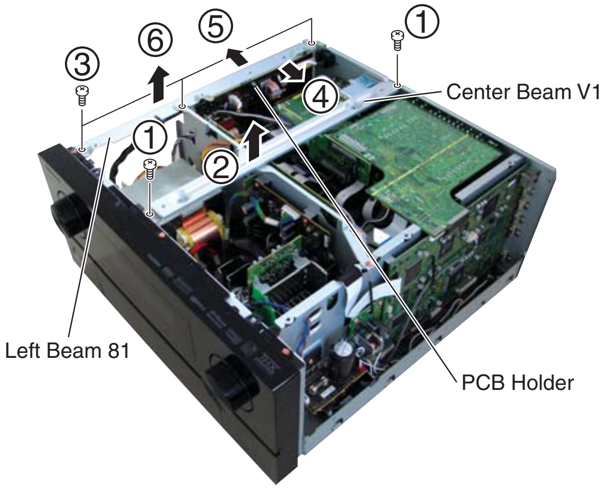
② Remove the Center Beam V1.

③ Remove the three screws.

④ Disconnect the one connector.

⑤ Remove the PCB Holder from the Left Beam 81.

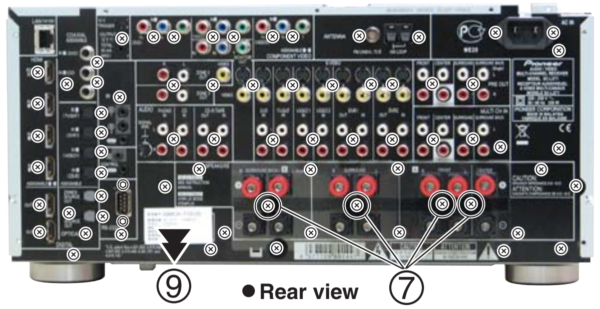
⑥ Remove the Left Beam 81.



⑦ Remove the four Cushion circle 14B.

⑧ Remove the 71 screws.

⑨ Remove the Rear Panel.

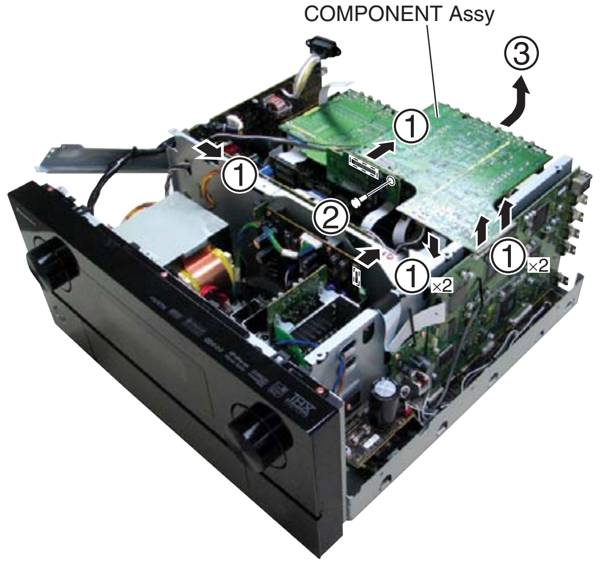


● **Rear view**

3 PCB Assys and ICE Cover

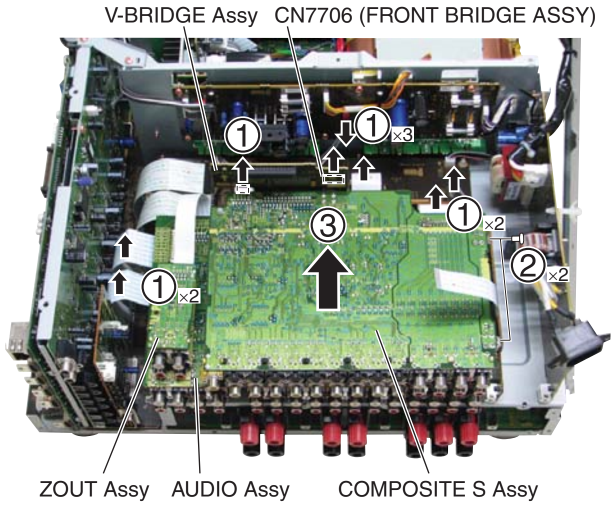
• COMPONENT Assy

① Disconnect the one flexible cable and five connectors.
② Remove the one Push Rivet.
③ Remove the COMPONENT Assy.


COMPONENT Assy
③
①
①
②
① ×2
① ×2

• AUDIO Assy, COMPOSITE S Assy, V-BRIDGE Assy and ZOUT Assy

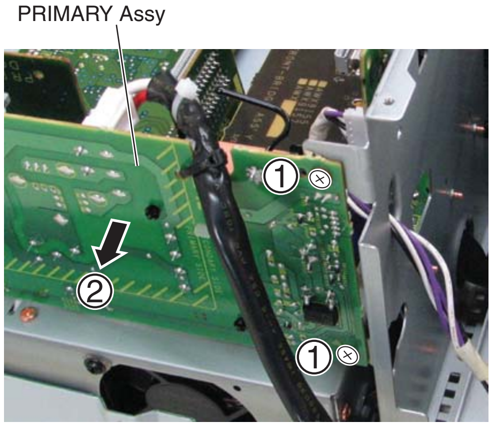
① Disconnect the six flexible cables and two connector.
② Remove the two Push Rivets.
③ Remove the AUDIO Assy, COMPOSITE S Assy, V-BRIDGE Assy and ZOUT Assy.


V-BRIDGE Assy
CN7706 (FRONT BRIDGE ASSY)
①
① ×3
③
① ×2
② ×2
① ×2
ZOUT Assy
AUDIO Assy
COMPOSITE S Assy

● **Rear view**

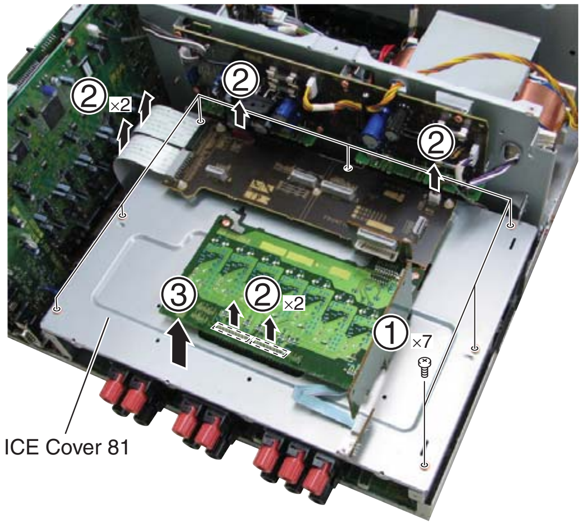
• PRIMARY Assy

① Remove the two screws.
② Remove the PRIMARY Assy.


PRIMARY Assy
①
②
①

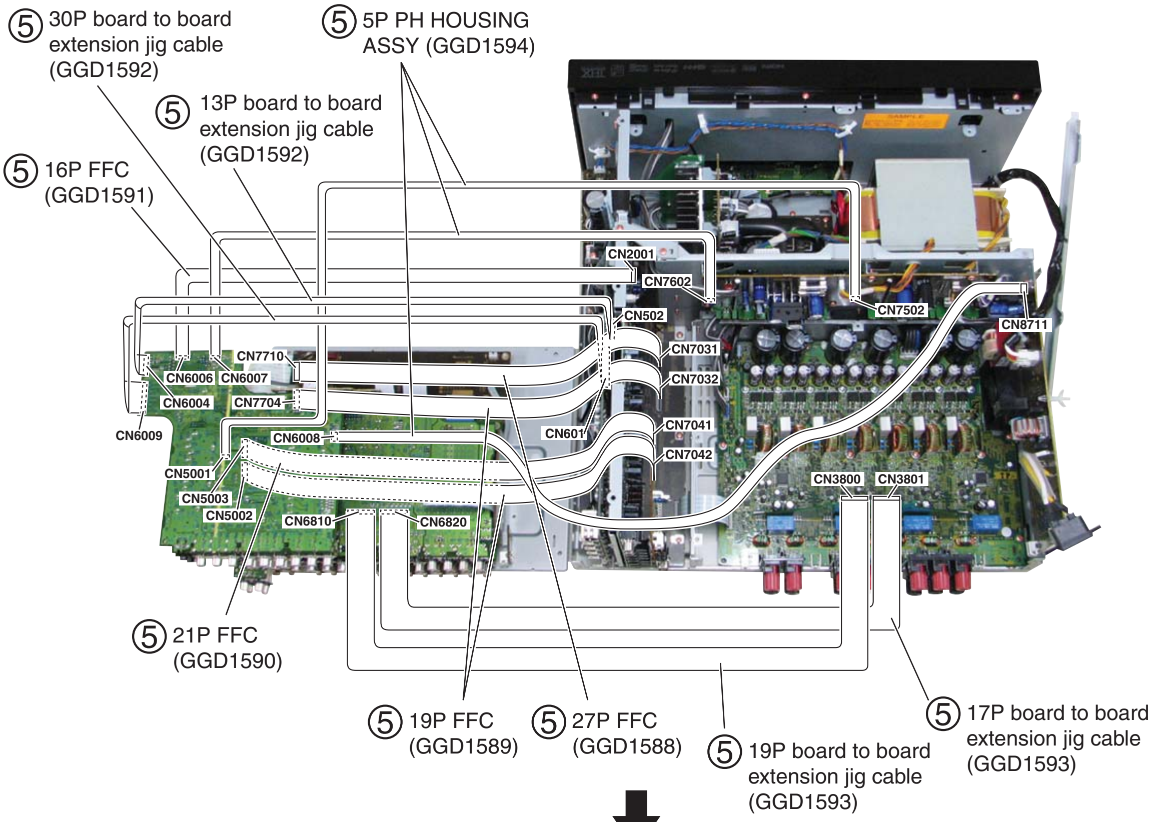
• ICE Cover 81 Section

① Remove the seven screws.
② Disconnect the two flexible cables and four connectors.
③ Remove the ICE Cover 81.


② ×2
②
②
③
② ×2
① ×7
ICE Cover 81

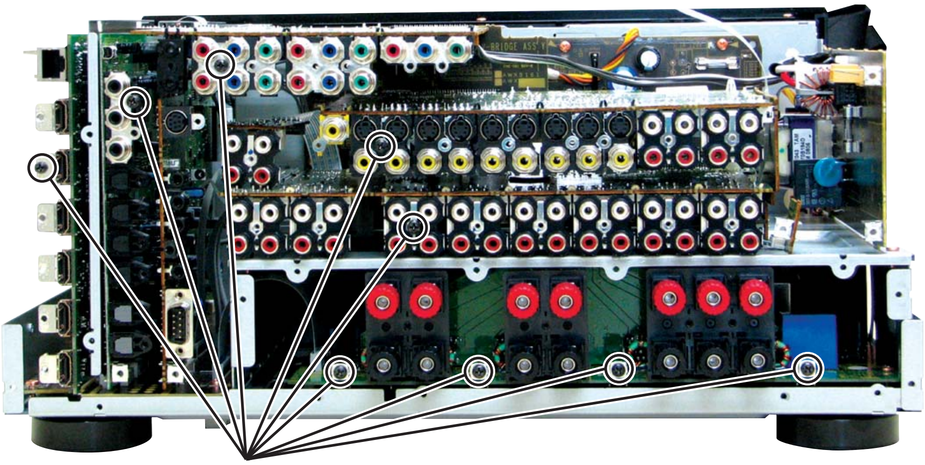
4 Diagnosis

① Reassembling the PRIMARY Assy.
② Reassembling the AUDIO Assy, COMPOSITE S Assy, V-BRIDGE Assy and ZOUT Assy on the Ice Cover 81.
③ Reassembling the COMPONENT Assy on the V-BRIDGE Assy.
④ Connect the twelve extension jig cables.
⑤ Arrange the unit as shown in the photo below.


⑤ 30P board to board extension jig cable (GGD1592)
⑤ 5P PH HOUSING ASSY (GGD1594)
⑤ 13P board to board extension jig cable (GGD1592)
⑤ 16P FFC (GGD1591)
CN2001
CN7602
CN7502
CN8711
CN502
CN7710
CN7031
CN6006
CN6007
CN7032
CN6004
CN7704
CN6009
CN6008
CN601
CN7041
CN7042
CN5001
CN3800
CN3801
CN5003
CN5002
CN6810
CN6820
⑤ 21P FFC (GGD1590)
⑤ 19P FFC (GGD1589)
⑤ 27P FFC (GGD1588)
⑤ 19P board to board extension jig cable (GGD1593)
⑤ 17P board to board extension jig cable (GGD1593)

Diagnosis

Note : As mentioned below, detach the rear panel, re-fasten the screws at the corresponding points, and connect the chassis to the ground.


Points to be connected to the chassis

8. EACH SETTING AND ADJUSTMENT

8.1 HOW TO UPDATE FIRMWARE

[1] MAIN, DSP, HDMI, EVENT and DISP Microcomputer

[Purpose]

Refer to this section when updating the firmware of each microcomputer is required by the service information, etc.

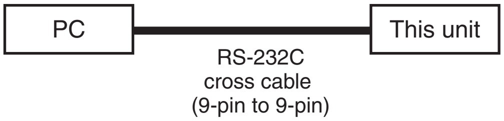
[Necessary Tools]

- PC with a serial port
- RS-232C cable (9-pin to 9-pin, cross)
- Firmware ("mot" extension) **(except DISP u-com)**
  ("sz0" extension) **(for DISP u-com)**
- Program for updating (ufu.exe: ver. 1.08) **(except DISP u-com)**
  (ufu.exe: ver. 1.10) **(for DISP u-com)**

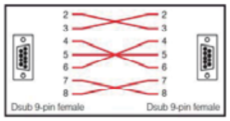
[Connections)]

Connect as indicated in the figure right:

(MAIN microcomputer)
(EVENT microcomputer)
(HDMI microcomputer)
(DSP microcomputer)
(DISP microcomputer)



Pin-out diagram of RS-232C cross cable



[Note]

Do NOT disconnect the AC power cords of this unit nor the PC.

1) HDMI, MAIN, DSP and EVENT microcomputer

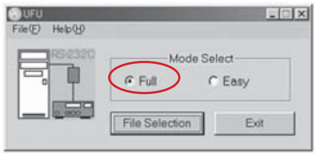
[Procedures]

1. Turn off the power to this unit by setting the main volume level to "---dB" and Multi-Zone to "OFF".
2. Connect the 232C cross cable and the PC, as indicated in "Connections".
3. Simultaneously press and hold the ENTER and MULTI-ZONE ON/OFF keys for about 5 seconds.
4. Turn the power ON at CONFIDENTIAL PANEL mode.
5. (MAIN microcomputer)
   Press ↓ key and select “MAIN DL [START]” display.
   Press ENTER key and set to “MAIN DL [GO ON]”.

   (EVENT microcomputer)
   Press ↓ key and select “EVNT DL [START]” display.
   Press ENTER key and set to “EVNT DL [GO ON]”.

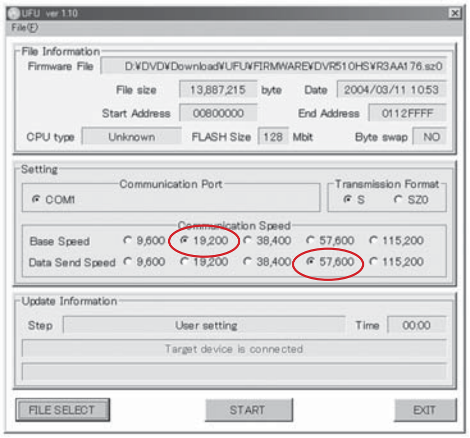
   (DSP microcomputer)
   Press ↓ key and select “DSPM DL [START]” display.
   Press ENTER key and set to “DSPM DL [GO ON]”.

   (HDMI microcomputer)
   Press ↓ key and select “HDMI DL [START]” display.
   Press ENTER key and set to “HDMI DL [GO ON]”.
6. Double-click on "ufu.exe: ver.1.08".
7. Check that "Full" is selected in MODE SELECT.
8. Select the firm ware file with "**mot**" extension.
9. Select the communication speed.
   - Basic speed: 19200
   - Data transfer speed: 57600
10. Click on "START" button.
11. "Completed" is displayed in the"ufu.exe" window.
12. Please retry it from 2 when it doesn’t so well.
13. Turn off the unit and end the ufu.exe.
    Disconnect the AC power cord of the unit.
    and the RS-232C cable.
14. Clear the memories.
    1) Connect the AC power cord of the unit
    2) Press “SETUP” button and “POWER” button.
    3) Then the receiver is turned on and displays“RESET[NO]”.
    4) Push “→” key and displays “RESET [RESET]”
    5) Then push “ENTER” key and displays “RESET? [OK]”.
    6) Push “ENTER” key and often a while “OK” is displayed.
15. Check the version.
    Following the procedures described in
    "Version indication" in "6.1 TEST MODE",
    check that the version has been changed to a new one.



Mode Select: ● Full ○ Easy

Check that "Full" is selected in MODE SELECT.



File Information
Firmware File: D:¥DVD¥Download¥UFU¥FIRMWARE¥DVR510HS¥R3AA176.sz0
File size: 13,887,215 byte
Date: 2004/03/11 10:53
Start Address: 00800000
End Address: 0112FFFF
CPU type: Unknown
FLASH Size: 128 Mbit
Byte swap: NO

Setting
Communication Port: ● COM1
Transmission Format: ● S ○ SZ0
Communication Speed
Base Speed: ○ 9,600 ● 19,200 ○ 38,400 ○ 57,600 ○ 115,200
Data Send Speed: ○ 9,600 ○ 19,200 ○ 38,400 ● 57,600 ○ 115,200

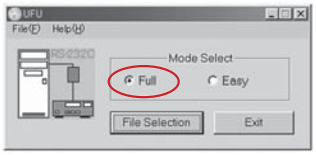
Update Information
Step: User setting
Time: 00:00
Target device is connected

Select the communication speed.
- Basic speed: 19200
- Data transfer speed: 57600

2) DISP microcomputer

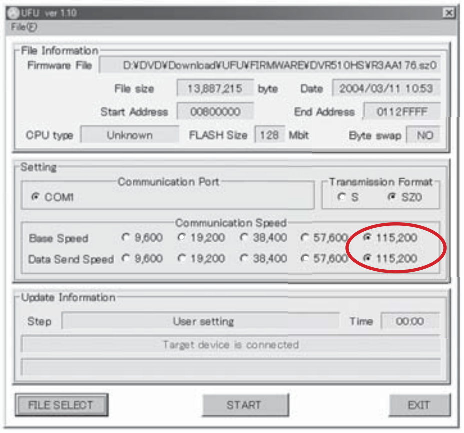
[Procedures]

1. Turn off the power to this unit by setting the main volume level to "---dB" and Multi-Zone to "OFF".
2. Connect the 232C cross cable and the PC, as indicated in "Connections".
3. Simultaneously press and hold the ENTER and MULTI-ZONE ON/OFF keys for about 5 seconds.
4. Turn the power ON at CONFIDENTIAL PANEL mode.
5. (DISP microcomputer)
   Press ↓ key and select “DISP DL [START]” display.
   Press ENTER key and set to “DISP DL [GO ON]”.
6. Double-click on "ufu.exe: ver.1.10".
7. Check that "Full" is selected in MODE SELECT.
8. Select the firm ware file with "**sz0**" extension.
9. Select the communication speed.
   - Basic speed: 115200
   - Data transfer speed: 115200
10. Click on "START" button.
11. "Completed" is displayed in the"ufu.exe" window.
12. Please retry it from 2 when it doesn’t so well.
13. Turn off the unit and end the ufu.exe.
    Disconnect the AC power cord of the unit.
    and the RS-232C cable.
14. Clear the memories.
    1) Connect the AC power cord of the unit
    2) Press “SETUP” button and “POWER” button.
    3) Then the receiver is turned on and displays “RESET [NO]”.
    4) Push “→” key and displays “RESET [RESET]”
    5) Then push “ENTER” key and displays “RESET? [OK]”.
    6) Push “ENTER” key and often a while “OK” is displayed.
15. Check the version.
    Following the procedures described in
    "Version indication" in "6.1 TEST MODE",
    check that the version has been changed to a new one.



Mode Select: ● Full ○ Easy

Check that "Full" is selected in MODE SELECT.



File Information
Firmware File: D:¥DVD¥Download¥UFU¥FIRMWARE¥DVR510HS¥R3AA176.sz0
File size: 13,887,215 byte
Date: 2004/03/11 10:53
Start Address: 00800000
End Address: 0112FFFF
CPU type: Unknown
FLASH Size: 128 Mbit
Byte swap: NO

Setting
Communication Port: ● COM1
Transmission Format: ○ S ● SZ0
Communication Speed
Base Speed: ○ 9,600 ○ 19,200 ○ 38,400 ○ 57,600 ● 115,200
Data Send Speed: ○ 9,600 ○ 19,200 ○ 38,400 ○ 57,600 ● 115,200

Update Information
Step: User setting
Time: 00:00
Target device is connected

Select the communication speed.
- Basic speed: 115200
- Data transfer speed: 115200

[2] DSP Flash Rom Update by USB Memory

[Preparations]

1. Copy the DSP Firmware for update to the USB MEMORY in advance.
   - * One file for DSP1 and DSP2
   - * Unable to update by the program except for 08 Mid receiver.
2. Connect the MONITOR OUT of this unit to DISPLAY.
3. Turn off the power to this unit by setting the main volume level to "---dB" and Multi-Zone to "OFF".
4. Connect the USB MEMORY to the iPod DIRECT USB terminal of this unit.

[Procedure]

1. Simultaneously press and hold POWER and RETURN keys for about 5 seconds.

2. The DSP firmware version is dislplayed automatically.
   Confirm the Version before the update.
   "f [*.***]   s [*.***] is displayed on the FL display. **(A)**
   f: DSP1 firmware
   s: DSP2 firmware

3. Select the "USB" on the monitor TV. **(B)**

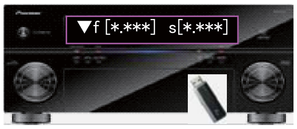
4. Select the file for Firmware update. **(C)**

5. The updating program starts and the HDMI indicator becomes flashing. **(D)**

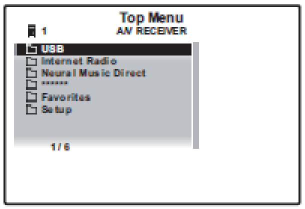
6. After about 2 minutes, the HDMI indicator stops flashing and the update is finished.
   Confirm "DSPF DL [OK]" is displayed on the FL dislay. **(E)**

7. Turn off the unit and disconnect the USB MEMORY.

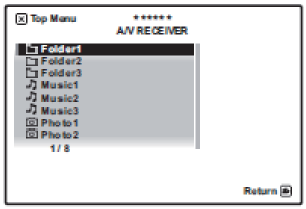
(A)



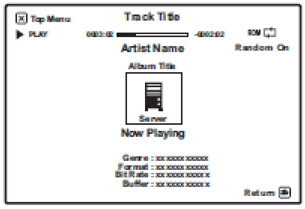
(B)


Top Menu
A/V RECEIVER
1
USB
Internet Radio
Neural Music Direct
******
Favorites
Setup
1/6

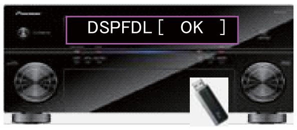
(C)


Top Menu
******
A/V RECEIVER
Folder1
Folder2
Folder3
Music1
Music2
Music3
Photo1
Photo2
1/8
Return

(D)


Top Menu
Track Title
PLAY
Artist Name
Random On
Album Title
Server
Now Playing
Return

(E)

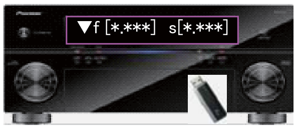


[Confirmation]

1. Simultaneously press and hold POWER and RETURN keys for about 5 seconds.

2. The DSP firmware version is dislplayed automatically.
   Confirm the Version after the update. **(F)**

(F)



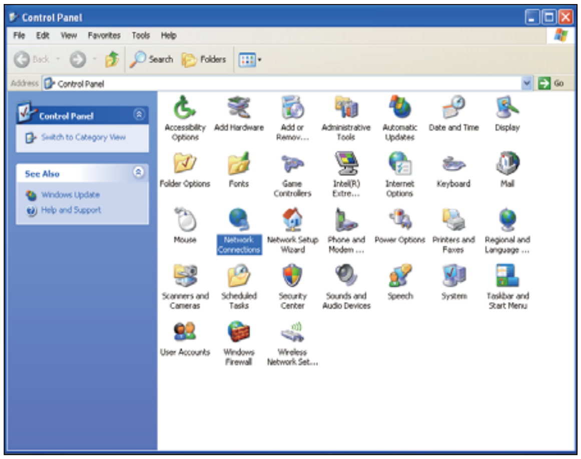
[3] Network Firmware Update Procedure

Note: Please prepare the firmware file in your PC before starting this procedure.

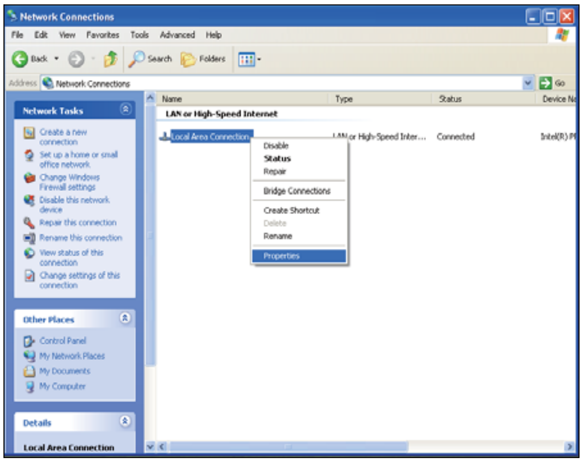
[Procedure]

1. Connect the LAN terminal on the AV receiver to the LAN terminal on PC with a LAN cable (cross or straight).
2. Set the Static IP Address of the PC.
   *When using the DHCP router, go to Step 3.
   It is not necessary to execute this Step 2 in that case.

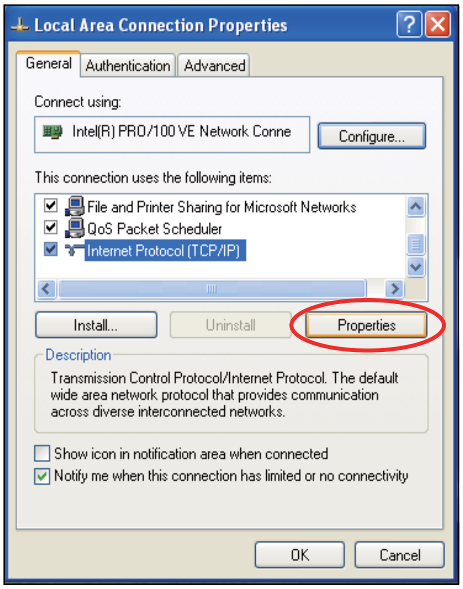
Open the Control Panel. --->
Open the Network Connections (double click).


Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel
Go
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel(R) Extre...
Internet Options
Keyboard
Mail
Mouse
Network Connections
Network Setup Wizard
Phone and Modem ...
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Security Center
Sounds and Audio Devices
Speech
System
Taskbar and Start Menu
User Accounts
Windows Firewall
Wireless Network Set...

Local Area Connection (right click) ---> Properties


Network Connections
File Edit View Favorites Tools Advanced Help
Back Search Folders
Address Network Connections
Go
Network Tasks
Create a new connection
Set up a home or small office network
Change Windows Firewall settings
Disable this network device
Repair this connection
Rename this connection
View status of this connection
Change settings of this connection
Other Places
Control Panel
My Network Places
My Documents
My Computer
Details
Local Area Connection
Name
Type
Status
Device Na
LAN or High-Speed Internet
Local Area Connection
LAN or High-Speed Inter...
Connected
Intel(R) P
Disable
Status
Repair
Bridge Connections
Create Shortcut
Delete
Rename
Properties

Local Area Connections Properties --->
Internet Protocol (TCP/IP) ---> Properties


Local Area Connection Properties
General
Authentication
Advanced
Configure...
Install...
Uninstall
Properties
OK
Cancel

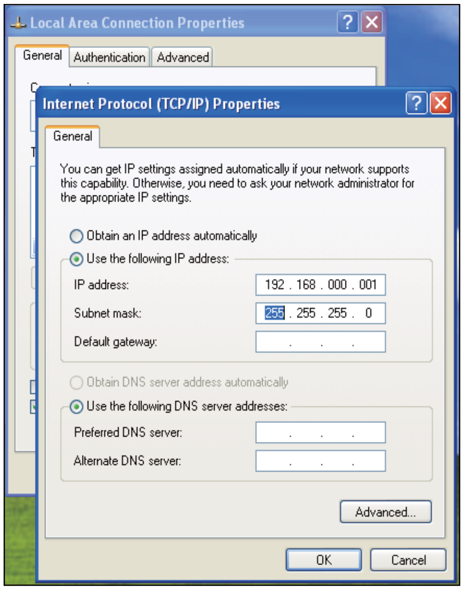
Connect using:
Intel(R) PRO/100 VE Network Conne

This connection uses the following items:
☑ File and Printer Sharing for Microsoft Networks
☑ QoS Packet Scheduler
☑ Internet Protocol (TCP/IP)

Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected
☑ Notify me when this connection has limited or no connectivity

Internet Protocol (TCP/IP) Properties


Local Area Connection Properties
General
Authentication
Advanced
Internet Protocol (TCP/IP) Properties
General
Advanced...
OK
Cancel

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
● Use the following IP address:
IP address: 192 . 168 . 000 . 001
Subnet mask: 255 . 255 . 255 . 0
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:
Preferred DNS server: . . .
Alternate DNS server: . . .

Set the following settings.

Use the following IP address:
IP address: 192.168.000.001
Subnet mask: 255.255.255.0

3. Set the Static IP Address of the AV receiver.

Note: Please confirm the Network IP settings of the customer's unit before changing the IP Address.
Home Media Gallery ---> Setup ---> NetworkSetup ---> NetworkFound ---> Static IP Address
If using the Static IP Address, please record it.

Home Media Gallery ---> Setup ---> NetworkSetup ---> NetworkFound ---> Static IP Address Change

Set the following settings.

IP address: 192.168.000.002
Subnet mask: 255.255.255.0
Gateway IP: 192.168.000.001
Proxy Server: No

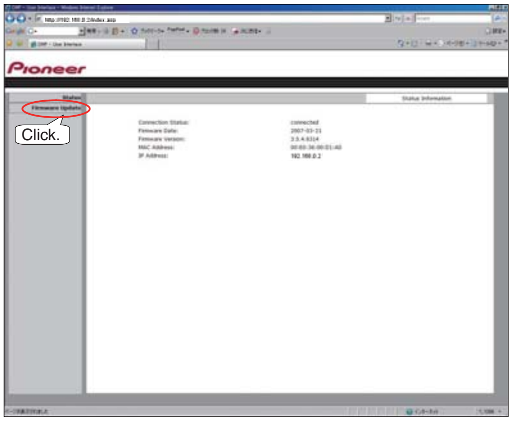
4. Open the Internet Explorer on the PC.

Enter the following address.

http:// 192.168.000.002

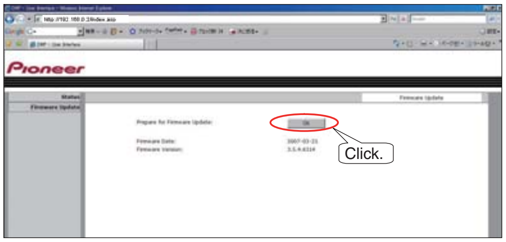
The following page will be appeared.

Click the Firmware Update.

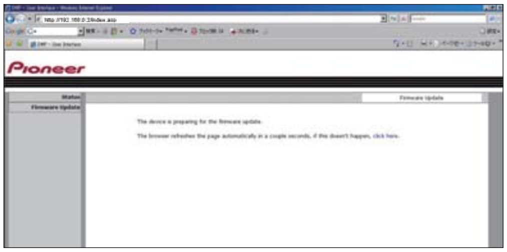

Pioneer
Status
Firmware Update
Status Information
Click.

Connection Status: connected
Firmware Date: 2007-03-21
Firmware Version: 3.5.4.6314
IP Address: 192.168.0.2

Click the Ok button.


Pioneer
Status
Firmware Update
Firmware Update
Ok
Click.

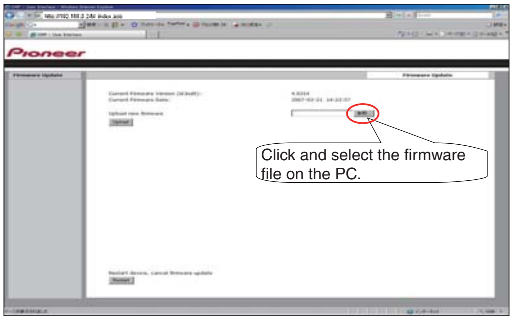
Prepare for Firmware Update:
Firmware Date: 2007-03-21
Firmware Version: 3.5.4.6314


Pioneer
Status
Firmware Update
Firmware Update

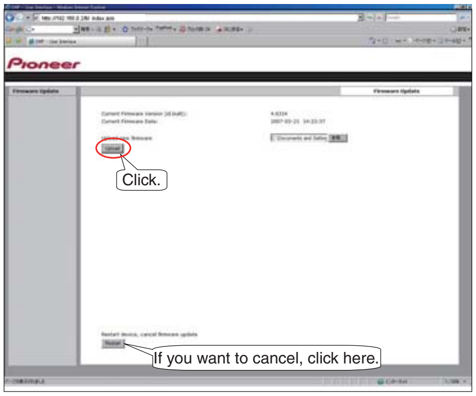
The device is preparing for the firmware update.

The browser refreshes the page automatically in a couple seconds, if this doesn't happen, click here.

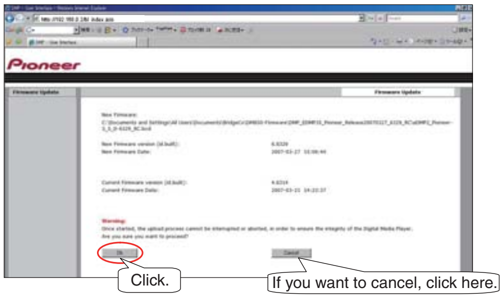
Click the browse button and select the firmware file in the PC.


Pioneer
Firmware Update
Firmware Update
Upload
Restart
Click and select the firmware file on the PC.

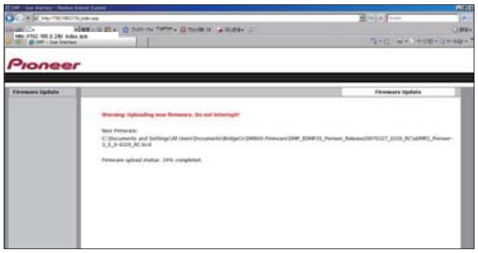
Click the Upload button.


Pioneer
Firmware Update
Firmware Update
Upload
Restart
Click.
If you want to cancel, click here.

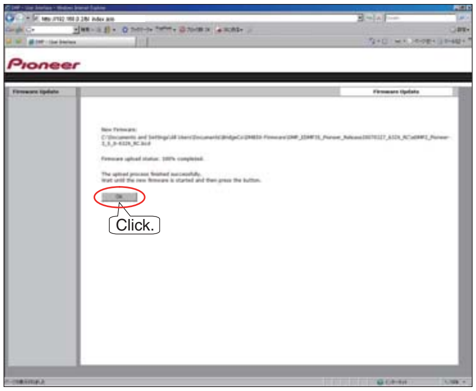
Click the Ok button.


Pioneer
Click.
If you want to cancel, click here.

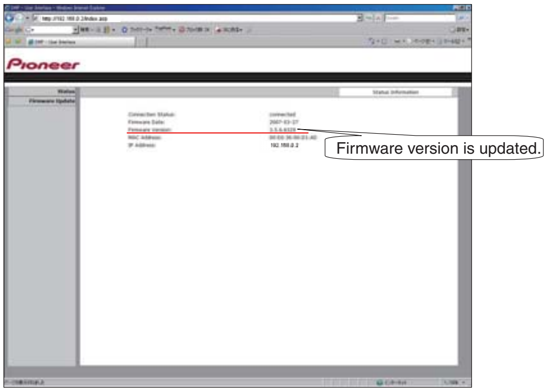
The firmware update will be started.



After the updating is completed, click the Ok button to return status page.


Pioneer
Click.

Confirm the Firmware Version.

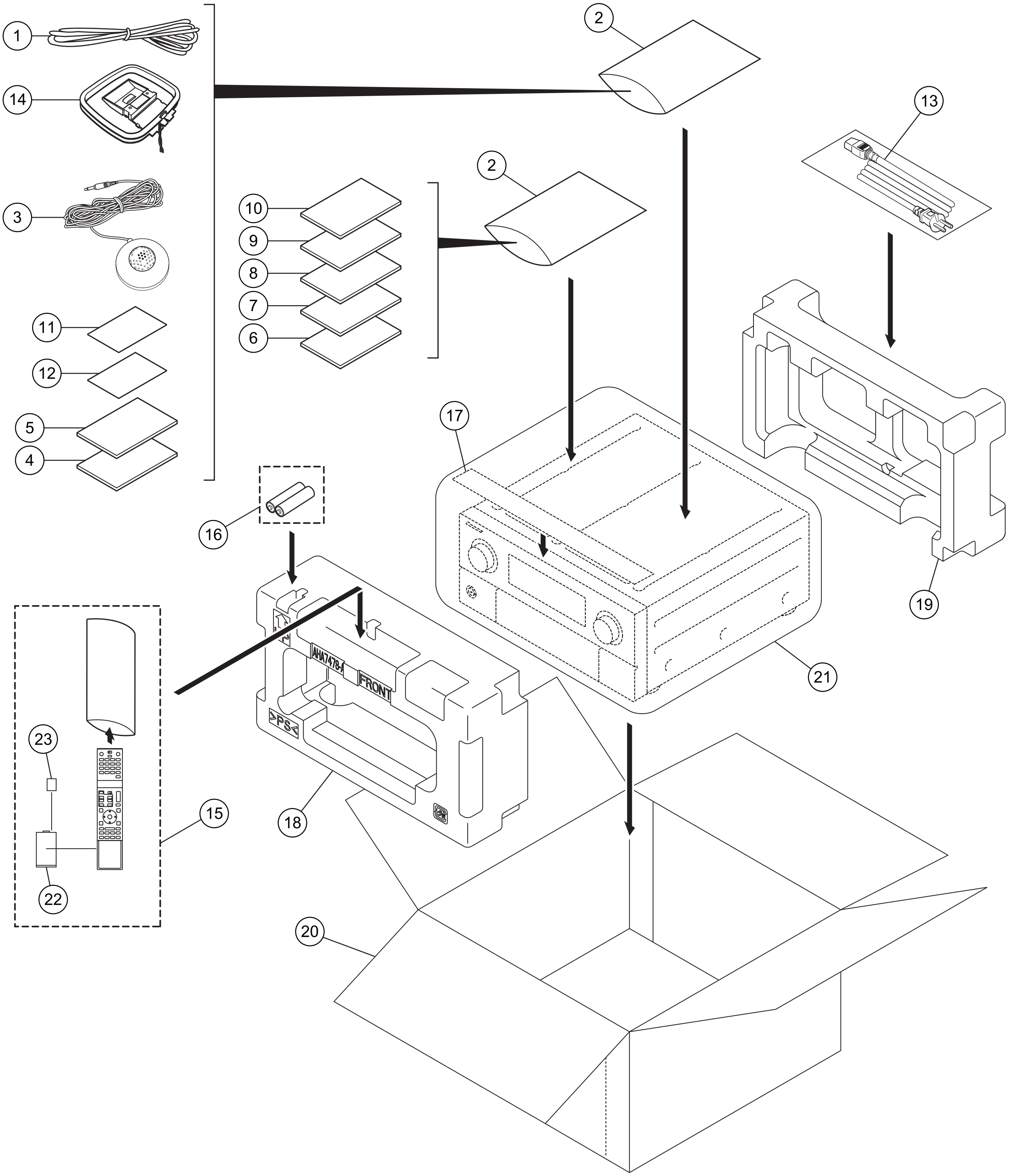

Pioneer
Firmware version is updated.

Note: Please restore the Network IP settings of the customer's unit after the update is completed.

9. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

9.1 PACKING SECTION



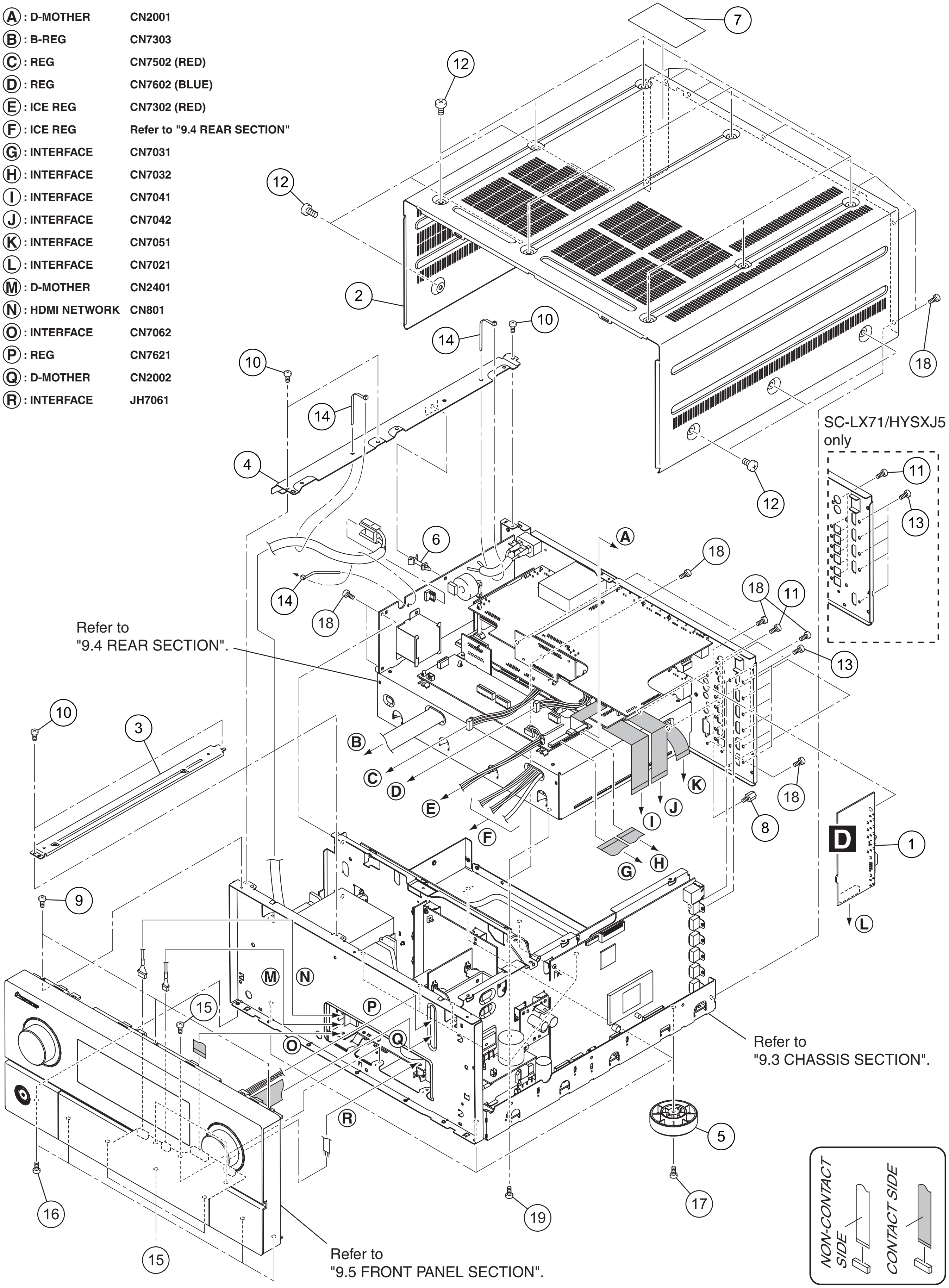
1
14
3
11
12
5
4
2
10
9
8
7
6
2
13
17
16
19
21
AHA7478-A
FRONT
PS
23
15
18
22
20

PACKING SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	FM Wire Antenna	ADH7030
NSP	2	Polyethylene Bag	AHG7117
	3	Setup Microphone (for Auto MCACC setup)	APM7008
	4	Operating Instructions (English)	ARB7393
	5	Operating Instructions (French)	ARC7799
	6	Operating Instructions (German)	ARC7800
	7	Operating Instructions (Italian)	ARC7801
	8	Operating Instructions (Spanish)	ARC7802
	9	Operating Instructions (Dutch)	ARC7803
	10	Operating Instructions (Russian)	ARC7804
	11	Caution Sheet SP,E	ARM7056
NSP	12	Warranty Card EU	ARY7128
⚠	13	AC Power Cord	ADG7062
	14	AM Loop Antenna	ATB7013
	15	Remote Control Unit	AXD7521
NSP	16	Dry Cell Battery AA/LR6	XEX3004
	17	Protection Sheet LX	AEH7030
	18	Front Pad 81	AHA7478
	19	Rear Pad 81	AHA7479
	20	Packing Case (SC-LX81)	AHD8603
	20	Packing Case (SC-LX71)	AHD8604
	21	Packing Sheet	RHC1023
	22	Battery Cover	AZN8031
	23	Label(WEEE)	ARW7322

9.2 EXTERIOR SECTION

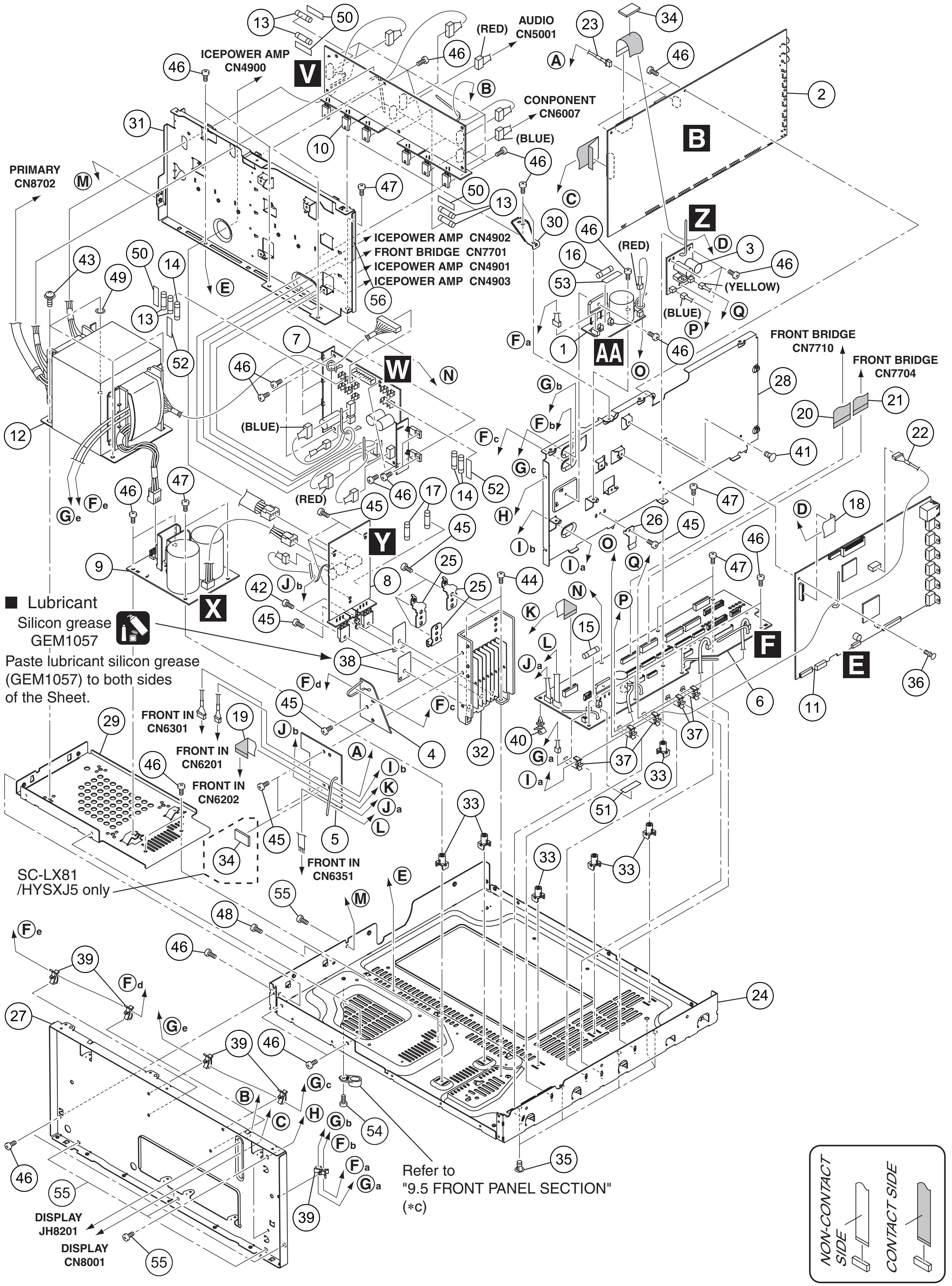
Ⓐ	: D-MOTHER	CN2001
Ⓑ	: B-REG	CN7303
Ⓒ	: REG	CN7502 (RED)
Ⓓ	: REG	CN7602 (BLUE)
Ⓔ	: ICE REG	CN7302 (RED)
Ⓕ	: ICE REG	Refer to "9.4 REAR SECTION"
Ⓖ	: INTERFACE	CN7031
Ⓗ	: INTERFACE	CN7032
Ⓘ	: INTERFACE	CN7041
Ⓙ	: INTERFACE	CN7042
Ⓚ	: INTERFACE	CN7051
Ⓛ	: INTERFACE	CN7021
Ⓜ	: D-MOTHER	CN2401
Ⓝ	: HDMI NETWORK	CN801
Ⓞ	: INTERFACE	CN7062
Ⓟ	: REG	CN7621
Ⓠ	: D-MOTHER	CN2002
Ⓡ	: INTERFACE	JH7061


7
12
12
2
10
14
10
18
14
4
12
SC-LX71/HYSXJ5 only
11
13
6
A
18
14
18
18
11
Refer to "9.4 REAR SECTION".
13
10
3
B
C
D
E
K
J
I
18
8
F
H
G
D
1
L
9
M
N
15
P
O
Q
R
Refer to "9.3 CHASSIS SECTION".
5
16
17
19
15
Refer to "9.5 FRONT PANEL SECTION".
NON-CONTACT SIDE
CONTACT SIDE

EXTERIOR SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	232C & CONTROL ASSY	AWX9209
	2	Bonnet 81B	AZN8036
	3	Center Beam V1	ANG7482
	4	Left Beam 81	ANG7624
	5	Insulator Assembly	DXA1904
	6	PCB Holder	PNW2562
	7	Lisence Label V5S	ARW7372
	8	Screw 2.85 x 7	ABA7078
	9	Screw	BBT30P080FCC
	10	Screw	BBZ30P080FCC
	11	Screw	BBZ30P080FTB
	12	Screw	BCZ40P060FTB
	13	Screw	BMZ30P040FTB
NSP	14	Binder (BK-1)	ZCA-BK1
	15	Screw	BBZ30P060FCC
	16	Screw	ABA1193
	17	Screw	ABZ30P080FTC
	18	Screw	ABA1011
	19	Screw	IBZ30P080FCC

9.3 CHASSIS SECTION



■ Lubricant

Silicon grease GEM1057

Paste lubricant silicon grease (GEM1057) to both sides of the Sheet.

SC-LX81 /HYSXJ5 only

Refer to "9.5 FRONT PANEL SECTION" (*c)

ICEPOWER AMP CN4900
(RED)
AUDIO CN5001
CONPONENT CN6007
(BLUE)
PRIMARY CN8702
ICEPOWER AMP CN4902
FRONT BRIDGE CN7701
ICEPOWER AMP CN4901
ICEPOWER AMP CN4903
(RED)
(YELLOW)
(BLUE)
FRONT BRIDGE CN7710
FRONT BRIDGE CN7704
(BLUE)
(RED)
FRONT IN CN6301
FRONT IN CN6201
FRONT IN CN6202
FRONT IN CN6351
DISPLAY JH8201
DISPLAY CN8001
V
B
Z
AA
W
X
Y
F
E
NON-CONTACT SIDE
CONTACT SIDE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56
A B C D E Fa Fb Fc Fd Fe Ga Gb Gc Ge H Ia Ib Ja Jb K L M N O P Q

EXTERIOR SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
⚠	1	HDMI RECT ASSY	AWX9156
	2	D-MOTHER ASSY	See Contrast table (2)
	3	DCDC ASSY	AWX9138
	4	H GUARD2 ASSY	AWX9147
	5	H GUARD1 ASSY	AWX9174
	6	INTERFACE ASSY	AWX9148
	7	ICE REG ASSY	AWX9149
	8	B REG ASSY	AWX9150
	9	B DIODE ASSY	AWX9171
	10	REG ASSY	AWX9152
	11	HDMI NETWORK ASSY	See Contrast table (2)
⚠	12	Power Transformer (T1501)	ATS7423
⚠	13	Fuse (FU13,FU14,FU21,FU22,FU31,FU32: 800mA)	REK1021
⚠	14	Fuse (FU11,FU12,FU15: 1A)	REK1022
⚠	15	Fuse (FU51: 1.6A)	REK1024
⚠	16	Fuse (FU41: 3.15A)	REK1027
⚠	17	Fuse (FU61,FU62: 10A)	REK1154
	18	22FFC/60V (J10)	ADD7655
	19	15FFC/60V (J13)	ADD7660
	20	27P FFC/60V (J15)	ADD7662
	21	19P FFC/60V (J16)	ADD7663
	22	5P Shielded Cable (J19)	ADX7621
	23	Housing Assy (Y21)	ADX7623
NSP	24	Under Base 81	ANA7210
	25	PCB Angle 45	ANG7406
NSP	26	Transistor Holder	ANG7543
NSP	27	Panel Stay 81	ANG7642
	28	DSP Shieled 81	ANG7622

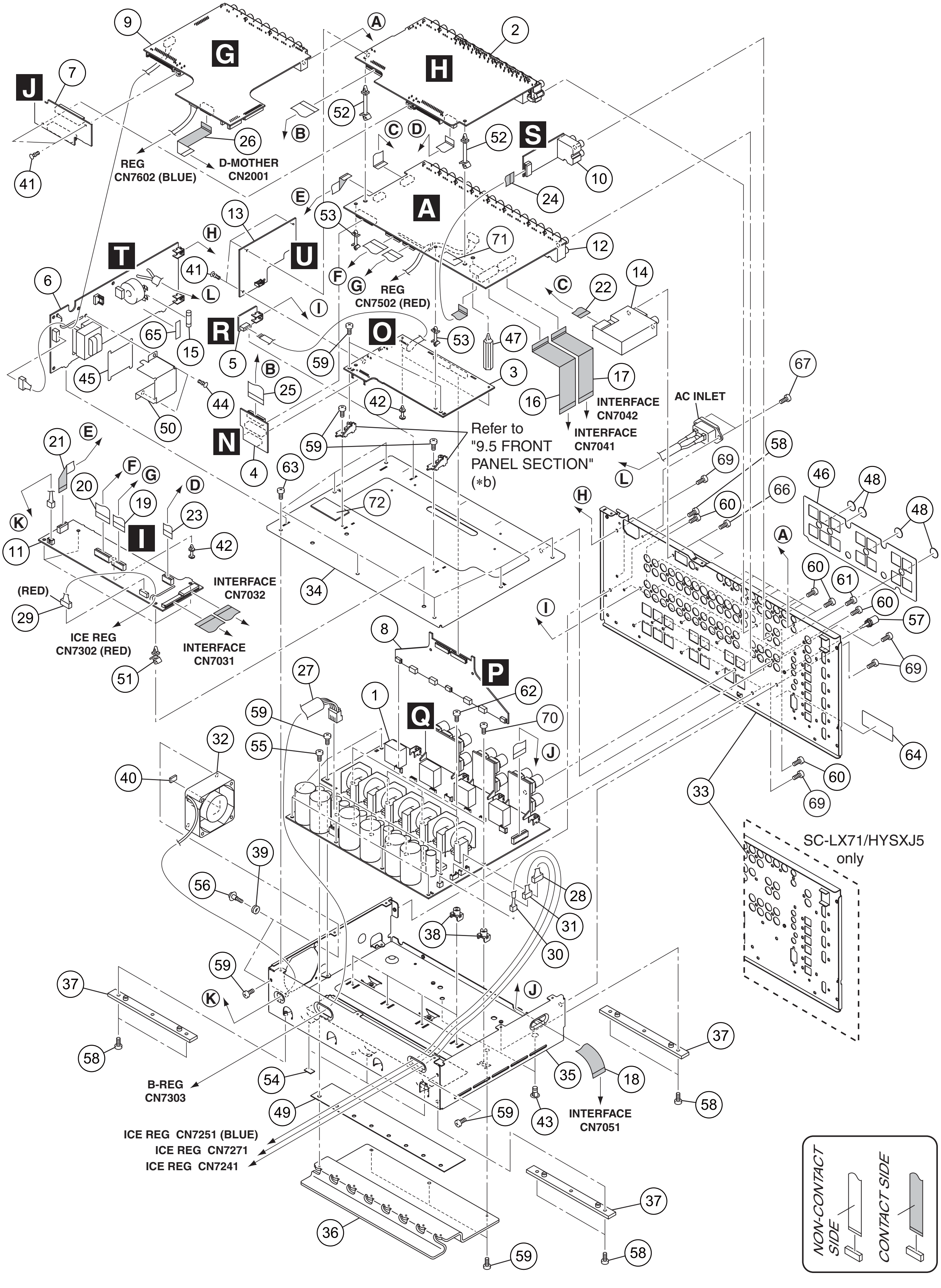
Mark	No.	Description	Part No.
	29	Trans Flame 81	ANG7623
	30	Support Plate 81	ANG7625
	31	REG Assy Plate 81	ANG7627
	32	REG Heatsink 81	ANH7204
	33	PCB Mold	AMR2533
	34	FFC Cushion	AEB7404
	35	PCB Holder	AEC7057
	36	Push Rivet	AEC7071
	37	Reuse Clamp	AEC7621
	38	Sheet	AEE7034
	39	Side Clamp	DEC2007
	40	Locking Card Spacer	PNW2917
NSP	41	PC Support	VEC1749
	42	Screw	ABA1052
	43	Screw 4 x 12	ABA7109
	44	Screw 3 x 10	ABA7134
	45	Screw	BBZ30P060FTC
	46	Screw	BBZ30P080FCC
	47	Screw	BBZ30P180FCC
	48	Screw	IBP30P090FCC
	49	Washer	WH40FNI
NSP	50	Fuse Card	AAX2367
NSP	51	Fuse Card	AAX2377
NSP	52	Fuse Card	AAX7293
NSP	53	Fuse Card	AAX7493
	54	Screw	ABZ30P080FTC
	55	Screw	ABA1011
	56	ACETATE TAPE 10X60	AEH7029

(2) CONTRAST TABLE

SC-LX81/HYSXJ5 and SC-LX71/HYSXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Mark	No.
	2	D-MOTHER ASSY	AWX9196	AWX9202
	11	HDMI NETWORK ASSY	AWX9234	AWX9235

9.4 REAR PANEL SECTION


9
G
A
2
H
J
7
52
26
B
REG
CN7602 (BLUE)
D-MOTHER
CN2001
41
C
D
52
S
10
24
E
13
53
A
71
12
T
U
H
6
41
L
F
G
REG
CN7502 (RED)
C
22
14
I
R
O
65
15
5
59
53
47
B
45
25
3
17
44
42
16
INTERFACE
CN7042
AC INLET
67
50
N
INTERFACE
CN7041
21
E
59
Refer to
"9.5 FRONT
PANEL SECTION"
(*b)
4
58
63
L
69
F
20
G
D
19
23
K
I
72
H
60
66
46
48
48
11
42
A
INTERFACE
CN7032
34
60
61
(RED)
60
29
I
57
ICE REG
CN7302 (RED)
INTERFACE
CN7031
8
P
69
51
27
62
59
1
Q
70
55
J
64
32
40
60
33
69
SC-LX71/HYSXJ5
only
39
56
28
38
31
30
59
37
K
J
37
58
B-REG
CN7303
54
35
18
49
59
43
INTERFACE
CN7051
58
ICE REG CN7251 (BLUE)
ICE REG CN7271
ICE REG CN7241
37
36
59
58
NON-CONTACT
SIDE
CONTACT SIDE

EXTERIOR SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	ICEPOWER AMP Assy	AWH7017
	2	COMPOSITE S ASSY	AWX9144
	3	ICE BUFFER ASSY	AWX9145
	4	PRE BRIDGE ASSY	AWX9146
	5	ICE SHIELD ASSY	AWX9173
⚠	6	PRIMARY ASSY	AWX9166
	7	V-BRIDGE ASSY	AWX9161
	8	ICE INTERFACE ASSY	AWX9137
	9	COMPONENT ASSY	See Contrast table (2)
	10	ZOUT ASSY	AWX9143
	11	FRONT BRIDGE ASSY	AWX9155
	12	AUDIO ASSY	AWX9206
	13	PRIMARY GUARD ASSY	AWX9172
	14	FM/AM TUNER UNIT	AXX7248
⚠	15	FUSE (FU1: 5A)	REK1029
	16	21P FFC/60V (J2)	ADD7645
	17	19P FFC/60V (J3)	ADD7646
	18	17P FFC/60V (J4)	ADD7647
	19	13P FFC/60V (J5)	ADD7648
	20	17P FFC/60V (J6)	ADD7649
	21	9P FFC/60V (J7)	ADD7650
	22	11P FFC/60V (J8)	ADD7651
	23	9P FFC/60V (J9)	ADD7652
	24	11FFC/60V (J11)	ADD7658
	25	19FFC/60V (J12)	ADD7659
	26	16FFC/60V (J14)	ADD7661
	27	4P Housing Assy (Y20)	ADX7622
	28	6P Housing Assy (Y22)	ADX7655
	29	6P Housing Assy (Y23)	ADX7656
	30	2P Housing Assy (Y24)	ADX7657
	31	4P Housing Assy (Y25)	ADX7677
⚠	32	DC Fan Motor	AXM7040
	33	Rear Panel	See Contrast table (2)
NSP	34	ICE COVER 81	ANF7047
NSP	35	ICE BOX 81	ANF7052
NSP	36	Heatsink 81	ANH7202
	37	Insulator ICE	AMR7523

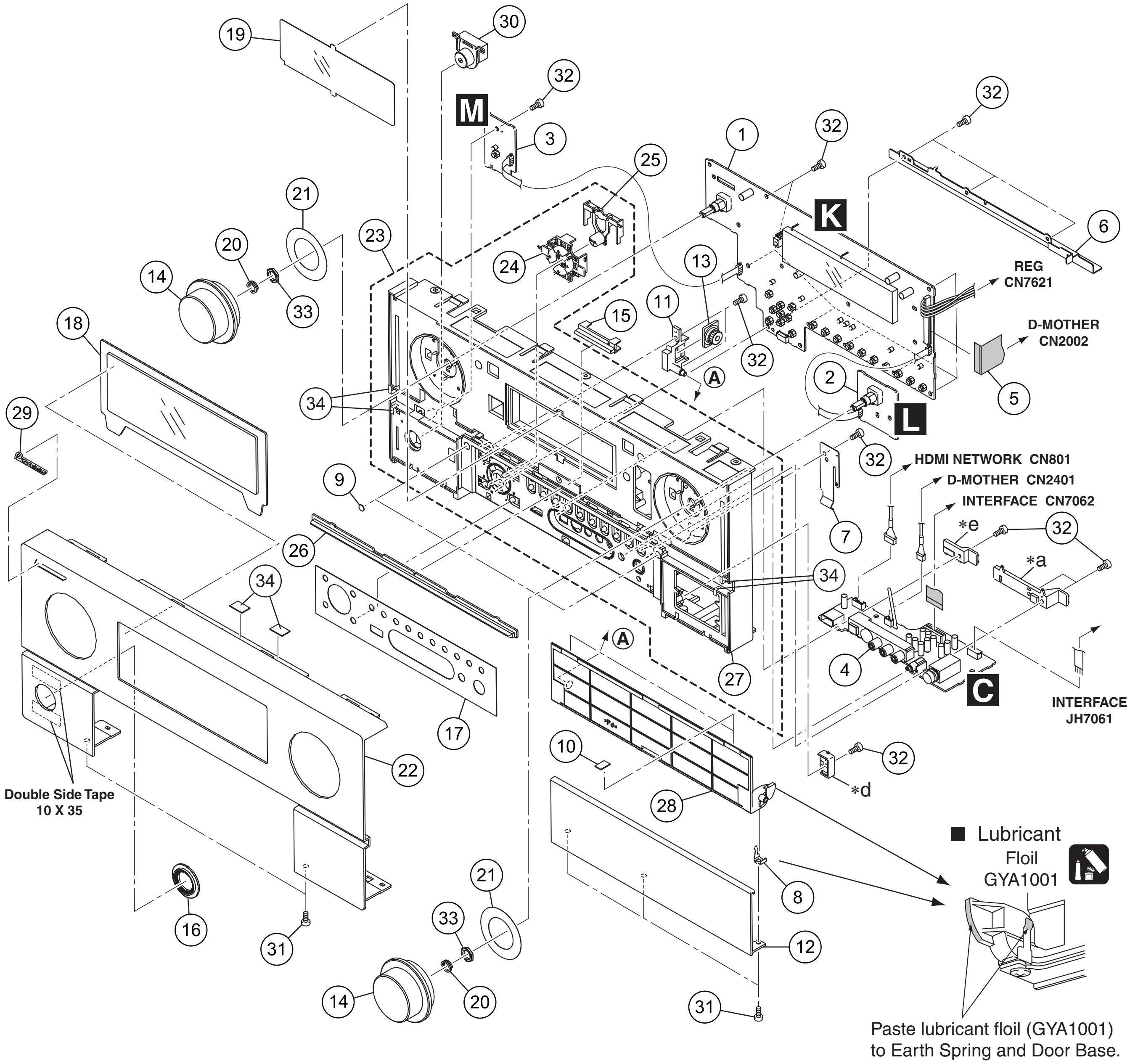
Mark	No.	Description	Part No.
	38	PCB Mold	AMR7536
	39	Damper Bushing	AEB7396
	40	Cushion 5 x 8	AEB7397
	41	Push Rivet	AEC7071
	42	PCB Spacer	AEC7080
	43	Card Spacer	AEC7133
	44	Nylon Rivet	AEC7406
	45	Primary Barrier	AEC7569
	46	SP Sheet 81	AEC7599
	47	Card Spacer 18K	AEC7613
	48	Cushion Circle 14B	AED7081
	49	Radiation Sheet A	AEE7064
	50	Shield Case	AMR7526
NSP	51	PCB Holder	PNW2100
NSP	52	Spacer 40	PNW2488
NSP	53	PCB Holder	REC1220
	54	Cushion 11 x 7	AED7092
	55	Screw 3 x 10	ABA7134
	56	Screw	ABA7146
	57	Terminal Screw	AKE-031-0
	58	Screw	BBZ30P060FCC
	59	Screw	BBZ30P080FCC
	60	Screw	BBZ30P080FTB
	61	Screw	BBZ30P100FCC
	62	Screw	BBZ30P140FCC
	63	Screw	AMZ30P060FTC
NSP	64	Label	VRW1629
NSP	65	Fuse Card	AAX7098
	66	Screw	ABA1207
	67	Screw	CBZ30P080FTB
	68	••••••	
	69	Screw	ABA1011
	70	Screw	IBZ30P150FCC
	71	ACETATE TAPE 10X35	AEH7032
	72	CUSHION T3 20X35	AEB7406

(2) CONTRAST TABLE

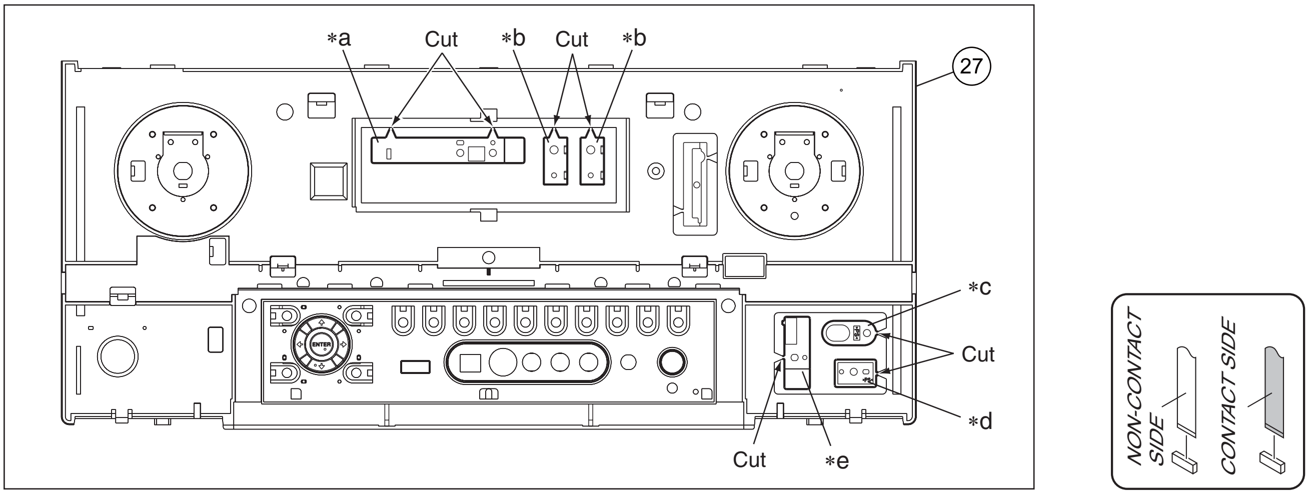
SC-LX81/HYSXJ5 and SC-LX71/HYSXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Mark	No.
	9	COMPONENT ASSY	AWX9141	AWX9211
	33	Rear Panel	ANC8526	ANC8533

9.5 FRONT PANEL SECTION


A
B
C
D
19
30
32
M
3
1
32
32
25
21
K
6
20
23
14
33
24
13
REG
CN7621
18
15
11
32
D-MOTHER
CN2002
A
2
5
29
34
L
9
32
HDMI NETWORK CN801
D-MOTHER CN2401
INTERFACE CN7062
7
26
*e
32
34
34
*a
C
A
27
4
INTERFACE
JH7061
17
10
32
22
*d
Double Side Tape
10 X 35
28
■ Lubricant
Floil
GYA1001
21
8
16
33
31
12
14
20
31

Paste lubricant floil (GYA1001) to Earth Spring and Door Base.


E
F
*a
Cut
*b
Cut
*b
27
*c
Cut
*d
Cut
*e
NON-CONTACT SIDE
CONTACT SIDE

EXTERIOR SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	DISPLAY ASSY	See Contrast table (2)
	2	VOL ASSY	AWX9159
	3	POWER SW ASSY	AWX9160
	4	FRONT IN ASSY	AWX9142
	5	29FFC/60V (J18)	ADD7665
	6	Panel Beam 81	ANG7620
	7	Door Spring	ABK7061
	8	Earth Spring 81	ABK7067
	9	Cushion Circle 6B	AED7083
	10	Cushion 11 x 7	AED7092
	11	Door Shaft 60	AMR7531
	12	Door Panel 81HY	ANB7490
	13	Damper Assy	AXA7156
	14	Vol.Knob B	AAA7052
	15	IB Lens V5SEL	AAK8430
	16	Power Ring LX	AAK8427
	17	Door Sheet 81HY	AAK8439
	18	Display Panel 81HY	AAK8442

Mark	No.	Description	Part No.
	19	Filter 81HY	AAK8459
	20	Vol Ring 60	ABH7249
	21	Knob Spacer 74	AEC7558
	22	Front Panel	See Contrast table (2)
	23	P Base 81HY Assy	AZN8038
NSP	24	+-Button 81	AAD7788
NSP	25	Enter Button 81	AAD7789
	26	Center Lens V5SH	AAK8428
NSP	27	Panel Base 81HY	AMB7988
	28	Door Base 81	AMR7540
	29	Pioneer Badge	VAM1158
	30	STANDBY BTN LXHY Assy	AAD7773
	31	Screw	BBZ30P080FTB
	32	Screw	BBZ30P100FNI
	33	Nut	NK90FTC
NSP	34	TAPE	PNM1249

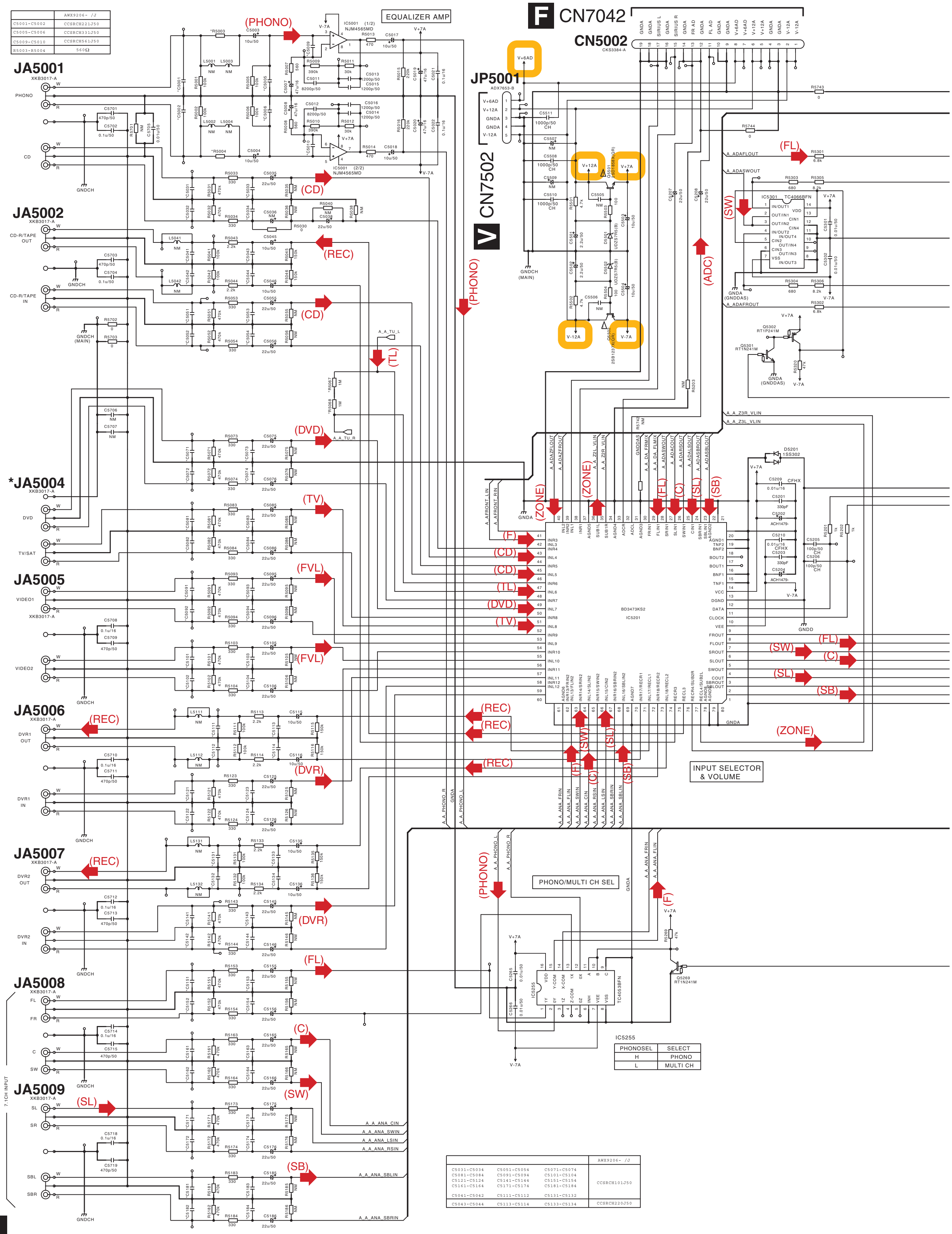
(2) CONTRAST TABLE

SC-LX81/HYSXJ5 and SC-LX71/HYSXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Mark	No.
	1	DISPLAY ASSY	AWX9158	AWX9238
	22	Front Panel	ANB7483	ANB7487

10. SCHEMATIC DIAGRAM

10.1 AUDIO ASSY


A
B
C
D
E
F
JA5001
XKB3017-A
PHONO
CD
JA5002
XKB3017-A
CD-R/TAPE OUT
CD-R/TAPE IN
*JA5004
XKB3017-A
DVD
TV/SAT
JA5005
VIDEO1
XKB3017-A
VIDEO2
JA5006
XKB3017-A
DVR1 OUT
DVR1 IN
JA5007
XKB3017-A
DVR2 OUT
DVR2 IN
JA5008
XKB3017-A
FL
FR
C
SW
JA5009
XKB3017-A
SL
SR
SBL
SBR
7.1CH INPUT
GNDCH
GNDCH (MAIN)
EQUALIZER AMP
IC5001 (1/2) NJM4565MD
IC5001 (2/2) NJM4565MD
(PHONO)
(CD)
(REC)
(DVD)
(TV)
(FVL)
(DVR)
(FL)
(C)
(SW)
(SL)
(SB)
(TL)
(ZONE)
(ADC)
(F)
F
CN7042
CN5002
CKS3384-A
GNDA
SIRIUS L
SIRIUS R
FR AD
FL AD
V+6AD
V+12A
V-12A
JP5001
ADX7653-B
V+6AD
V+12A
GNDA
GNDA
V-12A
V
CN7502
V+12A
V+7A
V-12A
V-7A
GNDCH (MAIN)
IC5301 TC4066BFN
GNDA (GNDDAS)
A_ADAFLOUT
A_ADASWOUT
Q5302 RT1P241M
Q5301 RT1N241M
D5201 1SS302
BD3473KS2
IC5201
GNDD
GNDA
INPUT SELECTOR & VOLUME
A_A_TU_L
A_A_TU_R
A_A_Z3R_VLIN
A_A_Z3L_VLIN
A_AFRONT_LIN
A_AFRONT_RIN
PHONO/MULTI CH SEL
IC5255
TC4053BFN
Q5269 RT1N241M
A_A_PHONO_R
A_A_PHONO_L
A_A_ANA_FRIN
A_A_ANA_FLIN
A_A_ANA_CIN
A_A_ANA_SWIN
A_A_ANA_LSIN
A_A_ANA_RSIN
A_A_ANA_SBLIN
A_A_ANA_SBRIN
IC5255

	AWX9206- /J
C5001-C5002	CCSRCH221J50
C5005-C5006	CCSRCH331J50
C5009-C5010	CCSRCH561J50
R5003-R5004	560Ω

PHONOSEL	SELECT
H	PHONO
L	MULTI CH

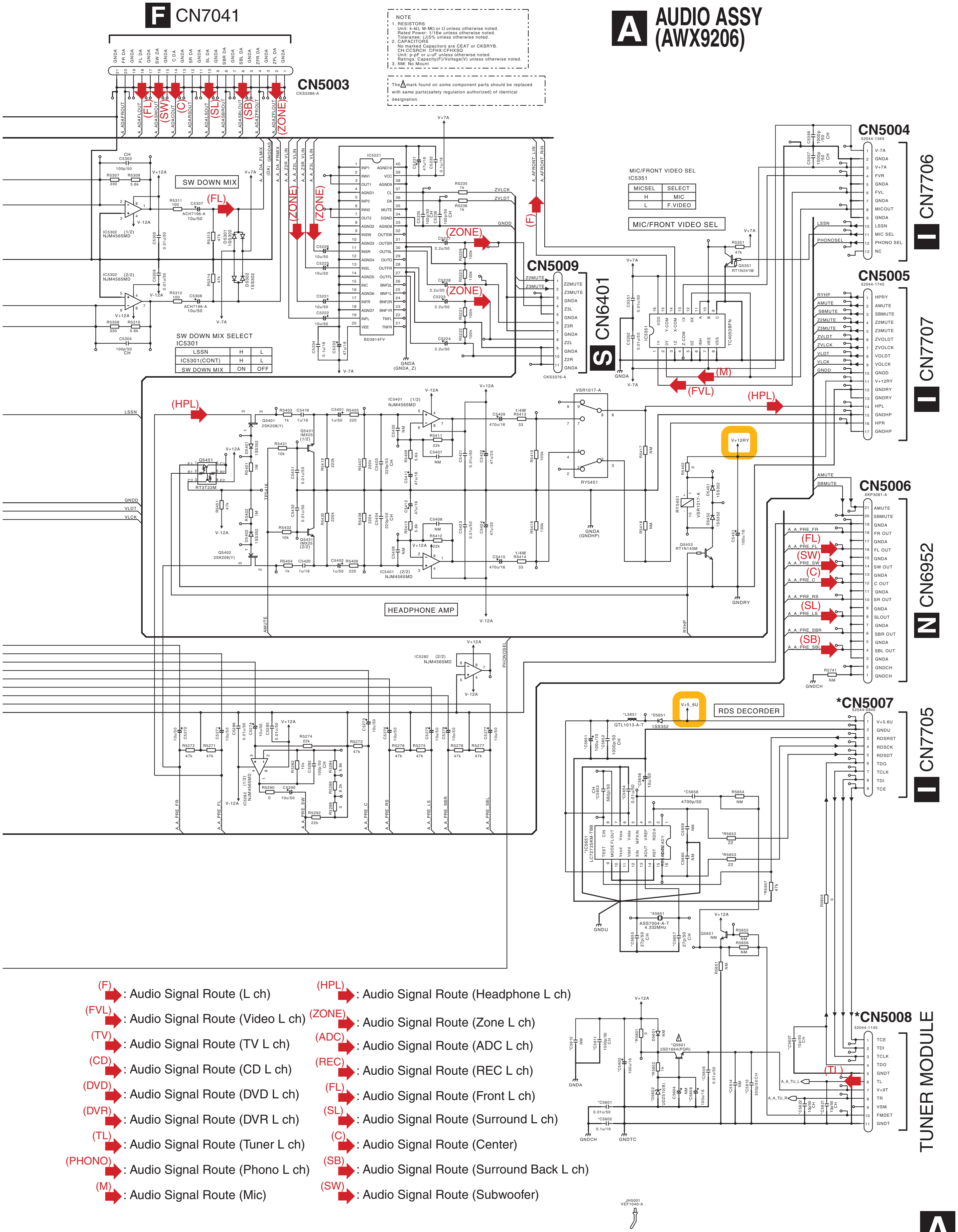
	AWX9206- /J
C5031-C5034 C5051-C5054 C5071-C5074 C5081-C5084 C5091-C5094 C5101-C5104 C5121-C5124 C5141-C5144 C5151-C5154 C5161-C5164 C5171-C5174 C5181-C5184 C5041-C5042 C5111-C5112 C5131-C5132	CCSRCH101J50
C5043-C5044 C5113-C5114 C5133-C5134	CCSRCH220J50

A

A AUDIO ASSY (AWX9206)

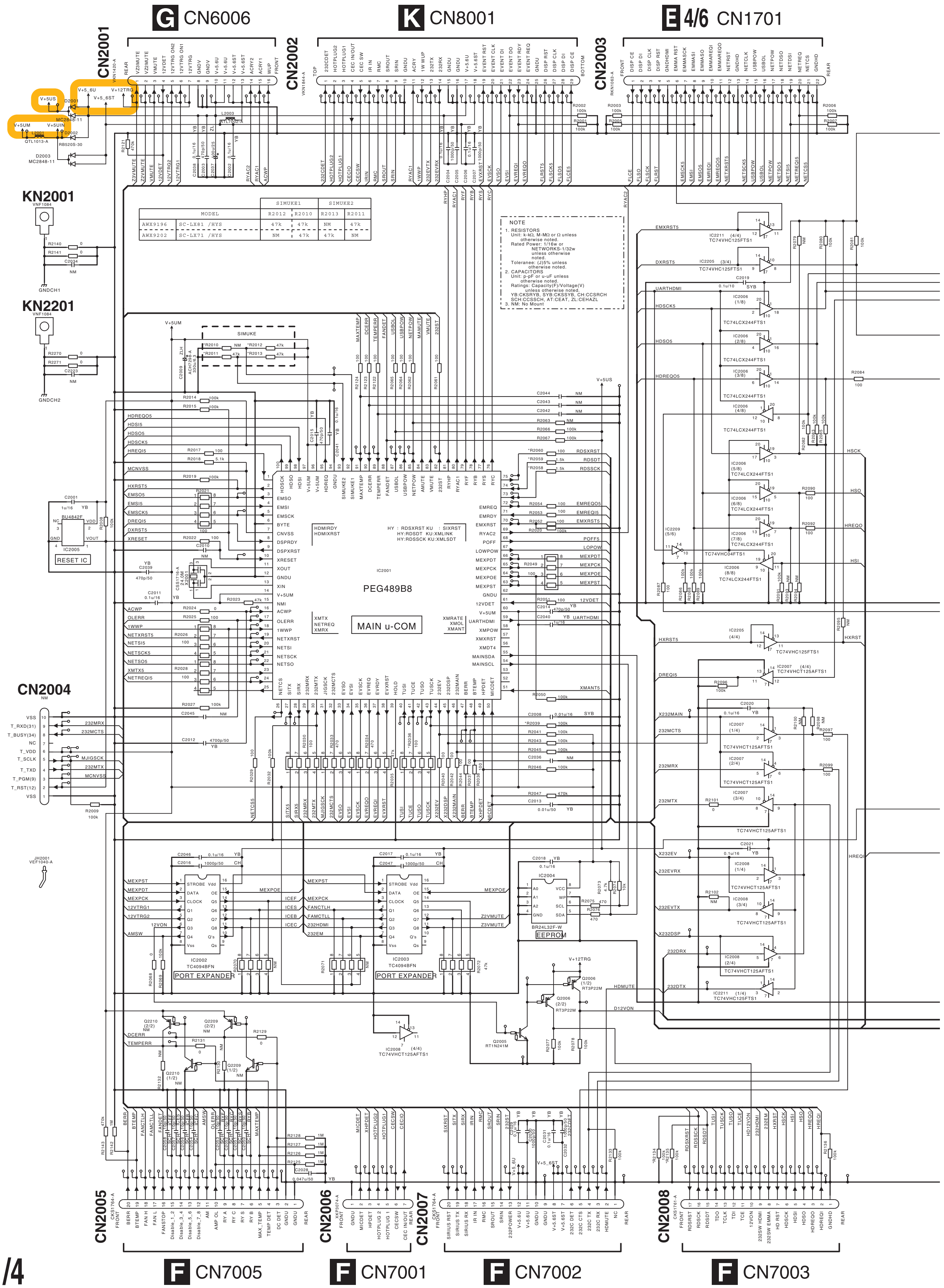
NOTE
1. RESISTORS
   Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
   Rated Power: 1/16w unless otherwise noted.
   Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
   No marked Capacitors are CEAT or CKSRYB.
   CH:CCSRCH CFHX:CFHXSQ
   Unit: p-pF or u-uF unless otherwise noted.
   Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.


F CN7041
CN5003 CKS3386-A
SW DOWN MIX
SW DOWN MIX SELECT IC5301
LSSN H L
IC5301(CONT) H L
SW DOWN MIX ON OFF
IC5221 BD3814FV
CN5009 CKS3376-A
S CN6401
MIC/FRONT VIDEO SEL IC5351
MICSEL SELECT
H MIC
L F.VIDEO
MIC/FRONT VIDEO SEL
TC4053BFN
CN5004 52044-1345
I CN7706
CN5005 52044-1745
I CN7707
HEADPHONE AMP
RY5451 VSR1017-A
CN5006 XKP3081-A
N CN6952
RDS DECORDER
*CN5007 52044-0945
I CN7705
*CN5008 52044-1145
TUNER MODULE
IC5651 LC72725KM-TBB
X5651 ASS7004-A-T 4.332MHz
JH5001 VEF1040-A
(FL) (SW) (C) (SL) (SB) (ZONE) (F) (HPL) (FVL) (M) (TL)
V+12RY
V+5_6U

(F) : Audio Signal Route (L ch)
(FVL) : Audio Signal Route (Video L ch)
(TV) : Audio Signal Route (TV L ch)
(CD) : Audio Signal Route (CD L ch)
(DVD) : Audio Signal Route (DVD L ch)
(DVR) : Audio Signal Route (DVR L ch)
(TL) : Audio Signal Route (Tuner L ch)
(PHONO) : Audio Signal Route (Phono L ch)
(M) : Audio Signal Route (Mic)
(HPL) : Audio Signal Route (Headphone L ch)
(ZONE) : Audio Signal Route (Zone L ch)
(ADC) : Audio Signal Route (ADC L ch)
(REC) : Audio Signal Route (REC L ch)
(FL) : Audio Signal Route (Front L ch)
(SL) : Audio Signal Route (Surround L ch)
(C) : Audio Signal Route (Center)
(SB) : Audio Signal Route (Surround Back L ch)
(SW) : Audio Signal Route (Subwoofer)

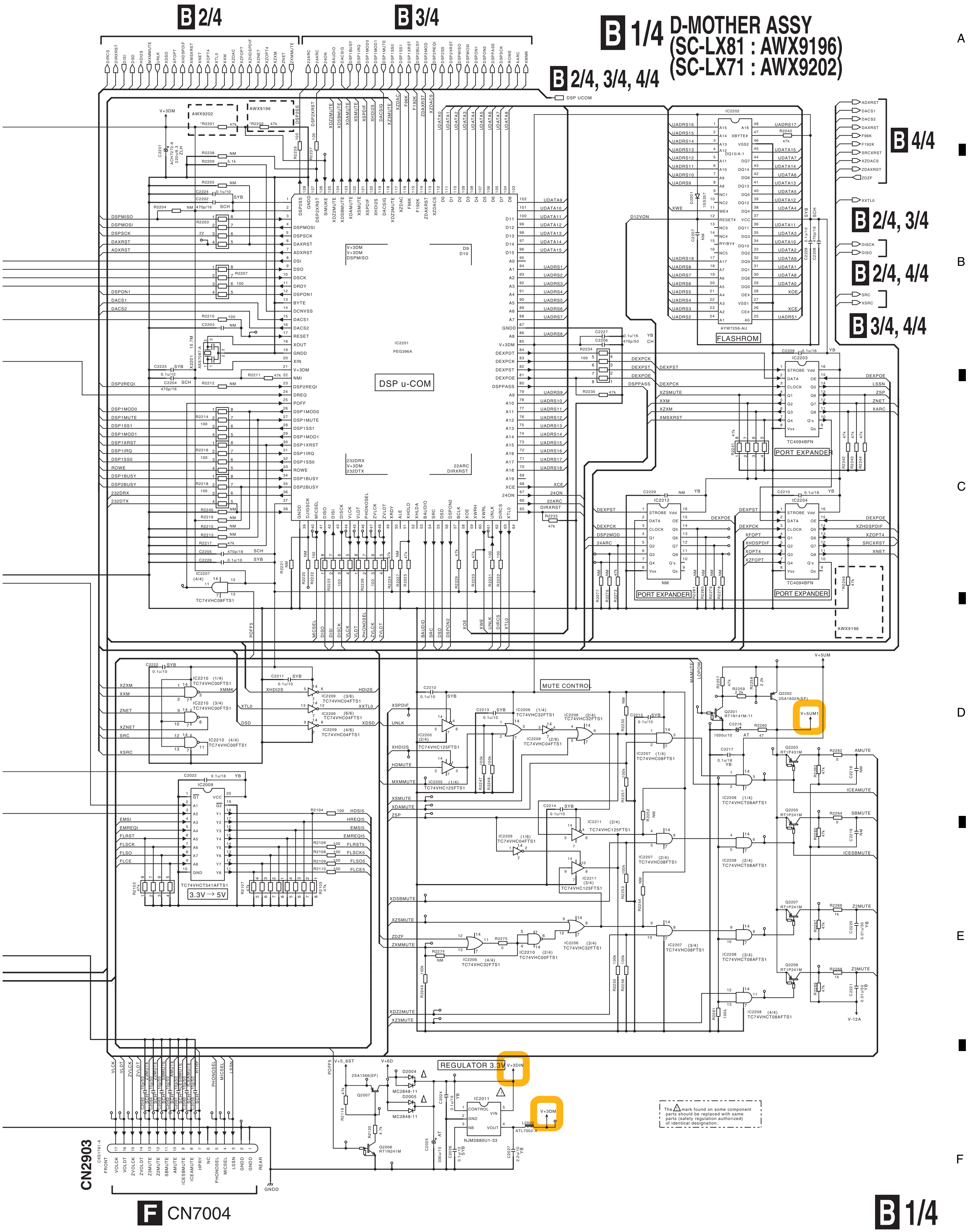
10.2 D-MOTHER ASSY (1/4)


G CN6006
K CN8001
E 4/6 CN1701
CN2001
CN2002
CN2003
KN2001
KN2201
CN2004
IC2001
PEG489B8
MAIN u-COM
IC2002 TC4094BFN
PORT EXPANDER
IC2003 TC4094BFN
PORT EXPANDER
IC2004
BR24L32F-W
EEPROM
IC2005
BU4842F
RESET IC
SIMUKE
CN2005
CN2006
CN2007
CN2008
F CN7005
F CN7001
F CN7002
F CN7003

	SIMUKE1		SIMUKE2	
MODEL	R2012	R2010	R2013	R2011
AWX9196 SC-LX81 /HYS	47k	47k	NM	47k
AWX9202 SC-LX71 /HYS	NM	47k	47k	NM

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w or NETWORKS-1/32w unless otherwise noted.
Tolerance: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, SYB:CKSSYB, CH:CCSRCH
SCH:CCSSCH, AL:CEAT, ZL:CEHAZL
3. NM: No Mount

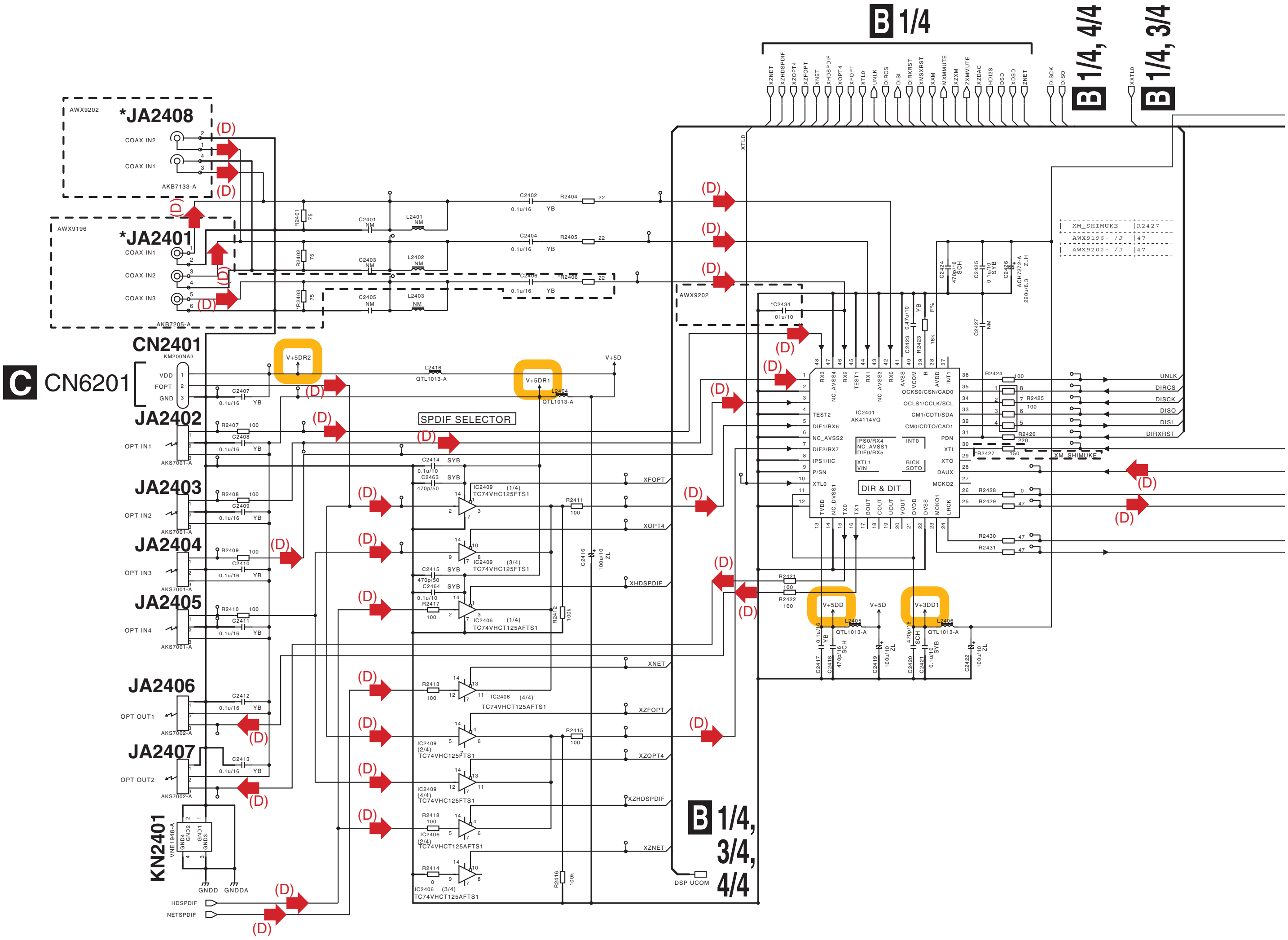
B 1/4 D-MOTHER ASSY
(SC-LX81 : AWX9196)
(SC-LX71 : AWX9202)

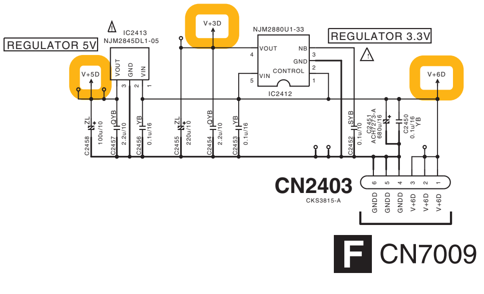

B 2/4
B 3/4
B 2/4, 3/4, 4/4
DSP UCOM
B 4/4
B 2/4, 3/4
B 2/4, 4/4
B 3/4, 4/4
AWX9202
AWX9196
IC2201
PEG396A
DSP u-COM
IC2202
AYW7256-AIJ
FLASHROM
IC2203
TC4094BFN
PORT EXPANDER
IC2212
PORT EXPANDER
IC2204
TC4094BFN
PORT EXPANDER
AWX9196
IC2210 (1/4) TC74VHC00FTS1
IC2210 (3/4) TC74VHC00FTS1
IC2210 (4/4) TC74VHC00FTS1
IC2209 (3/6) TC74VHC04FTS1
IC2209 (6/6) TC74VHC04FTS1
IC2209 (4/6) TC74VHC04FTS1
IC2009
TC74VHCT541AFTS1
3.3V → 5V
MUTE CONTROL
IC2205 (2/4) TC74VHC125FTS1
IC2205 (1/4) TC74VHC125FTS1
IC2206 (1/4) TC74VHC32FTS1
IC2206 (2/4) TC74VHC32FTS1
IC2206 (3/4) TC74VHC32FTS1
IC2206 (4/4) TC74VHC32FTS1
IC2209 (2/6) TC74VHC04FTS1
IC2209 (1/6) TC74VHC04FTS1
IC2211 (2/4) TC74VHC125FTS1
IC2211 (3/4) TC74VHC125FTS1
IC2207 (1/4) TC74VHC08FTS1
IC2207 (2/4) TC74VHC08FTS1
IC2207 (3/4) TC74VHC08FTS1
IC2207 (4/4) TC74VHC08FTS1
IC2208 (1/4) TC74VHCT08AFTS1
IC2208 (2/4) TC74VHCT08AFTS1
IC2208 (3/4) TC74VHCT08AFTS1
IC2208 (4/4) TC74VHCT08AFTS1
IC2210 (2/4) TC74VHC00FTS1
Q2201 RT1N141M-11
Q2202 2SA1602A(EF)
Q2203 RT1P431M
Q2205 RT1P241M
Q2207 RT1P241M
Q2208 RT1P241M
V+5UM
V+5UM1
AMUTE
ICEAMUTE
SBMUTE
ICESBMUTE
Z2MUTE
Z3MUTE
V-12A
REGULATOR 3.3V
V+3DIN
V+3DM
V+5_6ST
V+6D
2SA1366(EF)
Q2007
D2004
MC2848-11
D2005
MC2848-11
IC2011
NJM2880U1-33
L2002
ATL7002-A
Q2008
RT1N241M
CN2903
CKS1761-A
GNDD
POFF5
The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

F CN7004

B 1/4

10.3 D-MOTHER ASSY (2/4)


B 1/4
B 1/4, 4/4
B 1/4, 3/4
AWX9202
*JA2408
COAX IN2
COAX IN1
AKB7133-A
AWX9196
*JA2401
COAX IN1
COAX IN2
COAX IN3
AKB7205-A
CN2401
KM200NA3
C CN6201
VDD
FOPT
GND
V+5DR2
V+5DR1
V+5D
L2416
QTL1013-A
JA2402
OPT IN1
AKS7001-A
SPDIF SELECTOR
JA2403
OPT IN2
JA2404
OPT IN3
JA2405
OPT IN4
JA2406
OPT OUT1
AKS7002-A
JA2407
OPT OUT2
KN2401
VNE1948-A
GNDD
GNDDA
HDSPDIF
NETSPDIF
IC2409 TC74VHC125FTS1
IC2406 TC74VHCT125AFTS1
XFOPT
XOPT4
XHDSPDIF
XNET
XZFOPT
XZOPT4
XZHDSPDIF
XZNET
DSP UCOM
B 1/4, 3/4, 4/4
IC2401
AK4114VQ
DIR & DIT
XTL0
V+5DD
V+3DD1
L2405
L2406
UNLK
DIRCS
DISCK
DISO
DISI
DIRXRST
XM_SHIMUKE
AWX9196- /J 47
AWX9202- /J 47
R2427
(D)

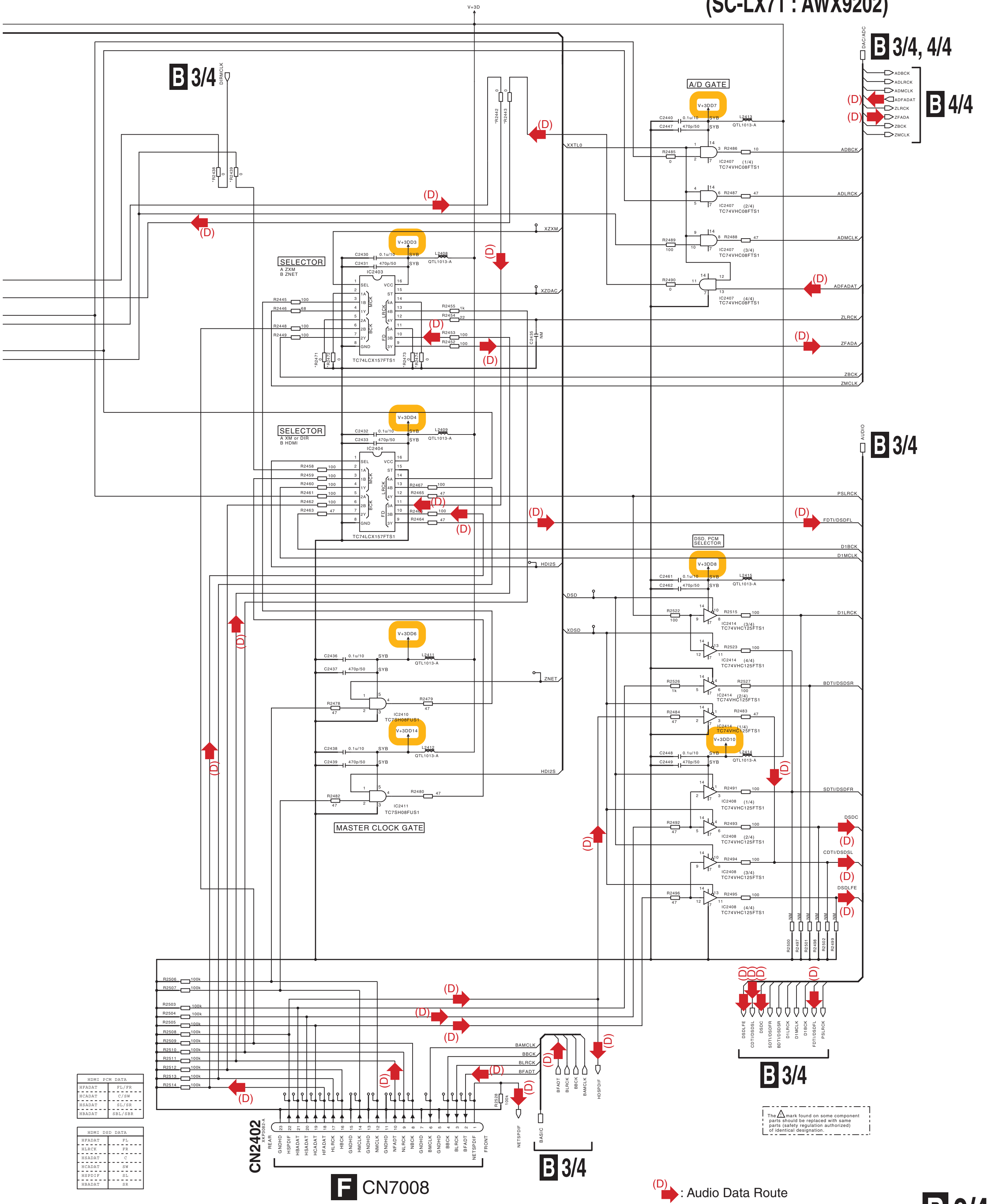

REGULATOR 5V
IC2413
NJM2845DL1-05
VOUT
GND
VIN
V+5D
V+3D
NJM2880U1-33
VOUT
NB
GND
CONTROL
VIN
IC2412
REGULATOR 3.3V
V+6D
CN2403
CKS3815-A
GNDD
V+6D
F CN7009

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w or NETWORKS-1/32w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB, SYB:CKSSYB, SCH:CCSSCH, ZL:CEHAZL
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

B 2/4

B 2/4 D-MOTHER ASSY
(SC-LX81 : AWX9196)
(SC-LX71 : AWX9202)


V+3D
B 3/4
DIRMCLK
B 3/4, 4/4
DAC/ADC
ADBCK
ADLRCK
ADMCLK
ADFADAT
ZLRCK
ZFADA
ZBCK
ZMCLK
B 4/4
A/D GATE
V+3DD7
IC2407 TC74VHC08FTS1
XXTL0
XZXM
XZDAC
SELECTOR
A ZXM
B ZNET
V+3DD3
IC2403
TC74LCX157FTS1
SELECTOR
A XM or DIR
B HDMI
V+3DD4
IC2404
TC74LCX157FTS1
AUDIO
B 3/4
PSLRCK
FDTI/DSDFL
D1BCK
D1MCLK
DSD, PCM SELECTOR
V+3DD8
HDI2S
DSD
XDSD
D1LRCK
IC2414 TC74VHC125FTS1
BDTI/DSDSR
V+3DD6
ZNET
IC2410 TC7SH08FUS1
V+3DD14
V+3DD10
IC2411 TC7SH08FUS1
MASTER CLOCK GATE
IC2408 TC74VHC125FTS1
SDTI/DSDFR
DSDC
CDTI/DSDSL
DSDLFE
BAMCLK
BBCK
BLRCK
BFADT
HSPDIF
BASIC
NETSPDIF
CN2402
XKP3082-A
REAR
FRONT
B 3/4
F CN7008
B 3/4
(D)

HDMI PCM DATA	
HFADAT	FL/FR
HCADAT	C/SW
HSADAT	SL/SR
HBADAT	SBL/SBR

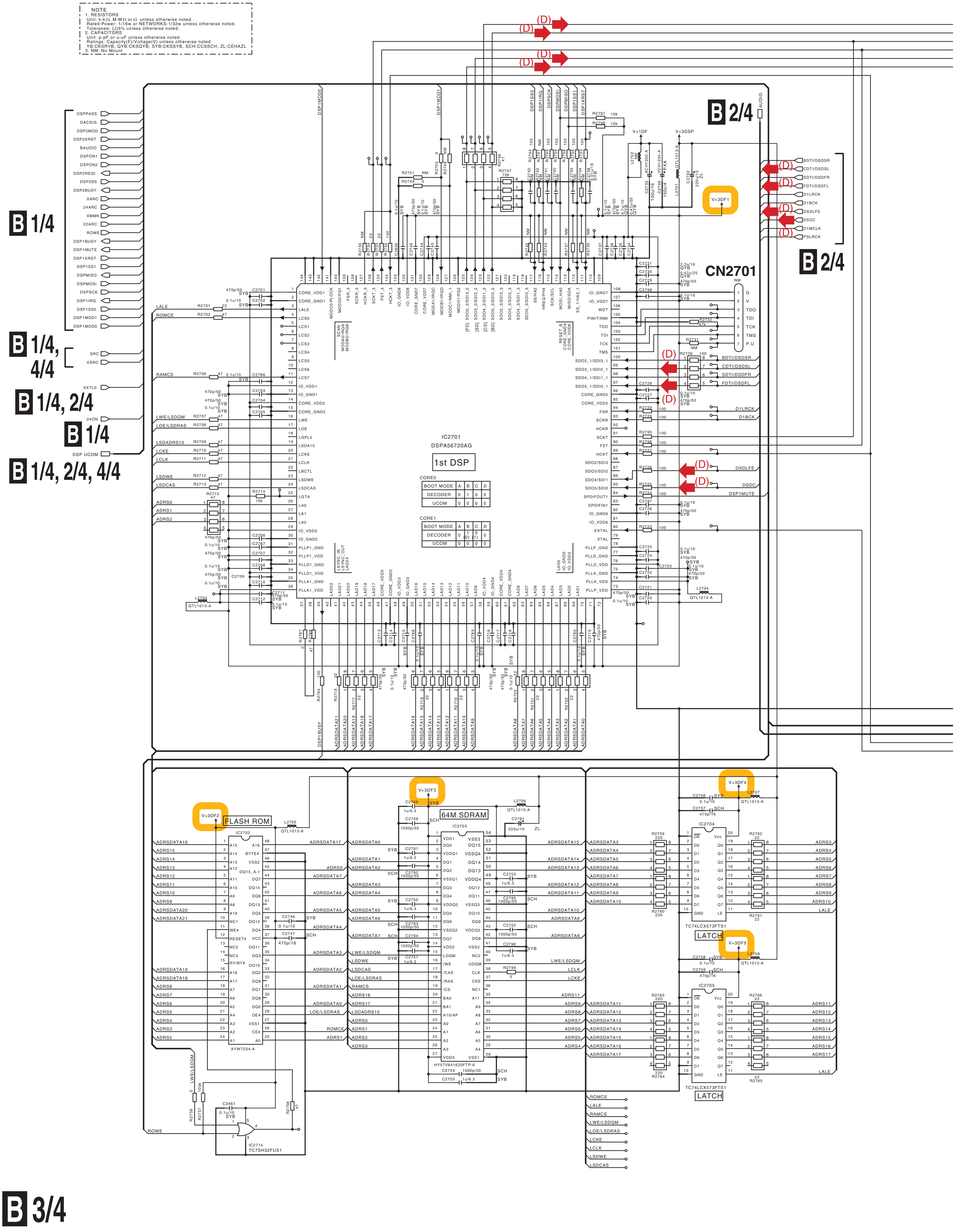
HDMI DSD DATA	
HFADAT	FL
HLRCK	FR
HSADAT	C
HCADAT	SW
HSPDIF	SL
HBADAT	SR

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

(D) : Audio Data Route

B 2/4

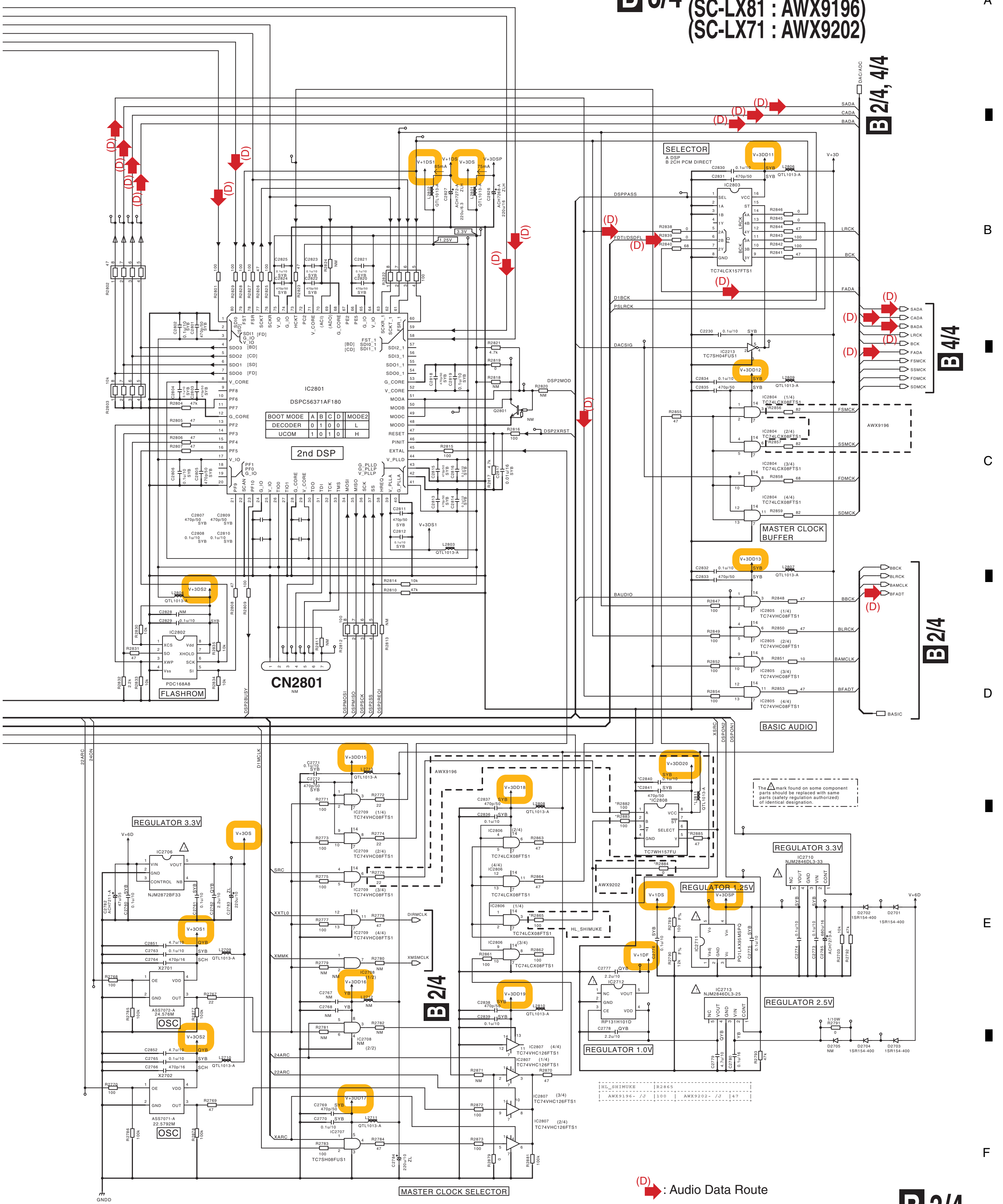
10.4 D-MOTHER ASSY (3/4)



NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w or NETWORKS-1/32w unless otherwise noted.
Tolerance: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB, SYB:CKSSYB, SCH:CCSSCH, ZL:CEHAZL
3. NM: No Mount

B 1/4
B 1/4, 4/4
B 1/4, 2/4
B 1/4
B 1/4, 2/4, 4/4
B 2/4
B 2/4
B 3/4
(D)
CN2701
NM
IC2701
DSPA56720AG
1st DSP
BOOT MODE
DECODER
UCOM
CORE0
CORE1
IC2702
FLASH ROM
AYW7234-A
IC2703
64M SDRAM
HY57V641620FTP-6
IC2704
TC74LCX573FTS1
LATCH
IC2705
TC74LCX573FTS1
LATCH
IC2714
TC7SH32FUS1
V+3DF1
V+3DF2
V+3DF3
V+3DF4
V+3DF5
V+1DF
V+3DSP
QTL1013-A
DSPPASS
DACSIG
DSP2MOD
DSP2XRST
BAUDIO
DSPON1
DSPON2
DSP2REQ
DSP2SS
DSP2BUSY
XARC
24ARC
XMMK
22ARC
ROWE
DSP1BUSY
DSP1MUTE
DSP1XRST
DSP1SS1
DSPMISO
DSPMOSI
DSPSCK
DSP1IRQ
DSP1SS0
DSP1MOD1
DSP1MOD0
SRC
XSRC
XXTL0
24ON
DSP UCOM
BDTI/DSDSR
CDTI/DSDSL
SDTI/DSDFR
FDTI/DSDFL
D1LRCK
D1BCK
DSDLFE
DSDC
D1MCLK
PSLRCK
DSP1MUTE
AUDIO

B 3/4 D-MOTHER ASSY
(SC-LX81 : AWX9196)
(SC-LX71 : AWX9202)


IC2801
DSPC56371AF180
2nd DSP
SELECTOR
A DSP
B 2CH PCM DIRECT
IC2803
TC74LCX157FTS1
IC2213
TC7SH04FUS1
MASTER CLOCK BUFFER
AWX9196
IC2804 TC74LCX08FTS1
IC2805 TC74VHC08FTS1
BASIC AUDIO
IC2802
PDC168A8
FLASHROM
CN2801
REGULATOR 3.3V
IC2706
NJM2872BF33
X2701
ASS7072-A
24.576M
OSC
X2702
ASS7071-A
22.5792M
OSC
IC2709 TC74VHC08FTS1
IC2708
IC2707 TC7SH08FUS1
MASTER CLOCK SELECTOR
IC2806 TC74LCX08FTS1
IC2807 TC74VHC126FTS1
IC2808 TC7WH157FU
AWX9202
HL_SHIMUKE
REGULATOR 3.3V
IC2710 NJM2846DL3-33
REGULATOR 1.25V
IC2711 PQ1LAX95MSPQ
IC2712 RP131H101D
REGULATOR 1.0V
IC2713 NJM2846DL3-25
REGULATOR 2.5V
V+1DS1
V+3DS
V+3DSP
V+3DD11
V+3DD12
V+3DD13
V+3DS2
V+3DD15
V+3OS
V+3OS1
V+3OS2
V+3DD16
V+3DD17
V+3DD18
V+3DD19
V+3DD20
V+1DS
V+1DF
SADA
CADA
BADA
LRCK
BCK
FADA
FSMCK
SSMCK
FDMCK
SDMCK
BBCK
BLRCK
BAMCLK
BFADT
BASIC
DSPPASS
DACSIG
BAUDIO
DSP2MOD
DSP2XRST
GNDD
B 2/4, 4/4
B 4/4
B 2/4
(D)

BOOT MODE	A	B	C	D	MODE2
DECODER	0	1	0	0	L
UCOM	1	0	1	0	H

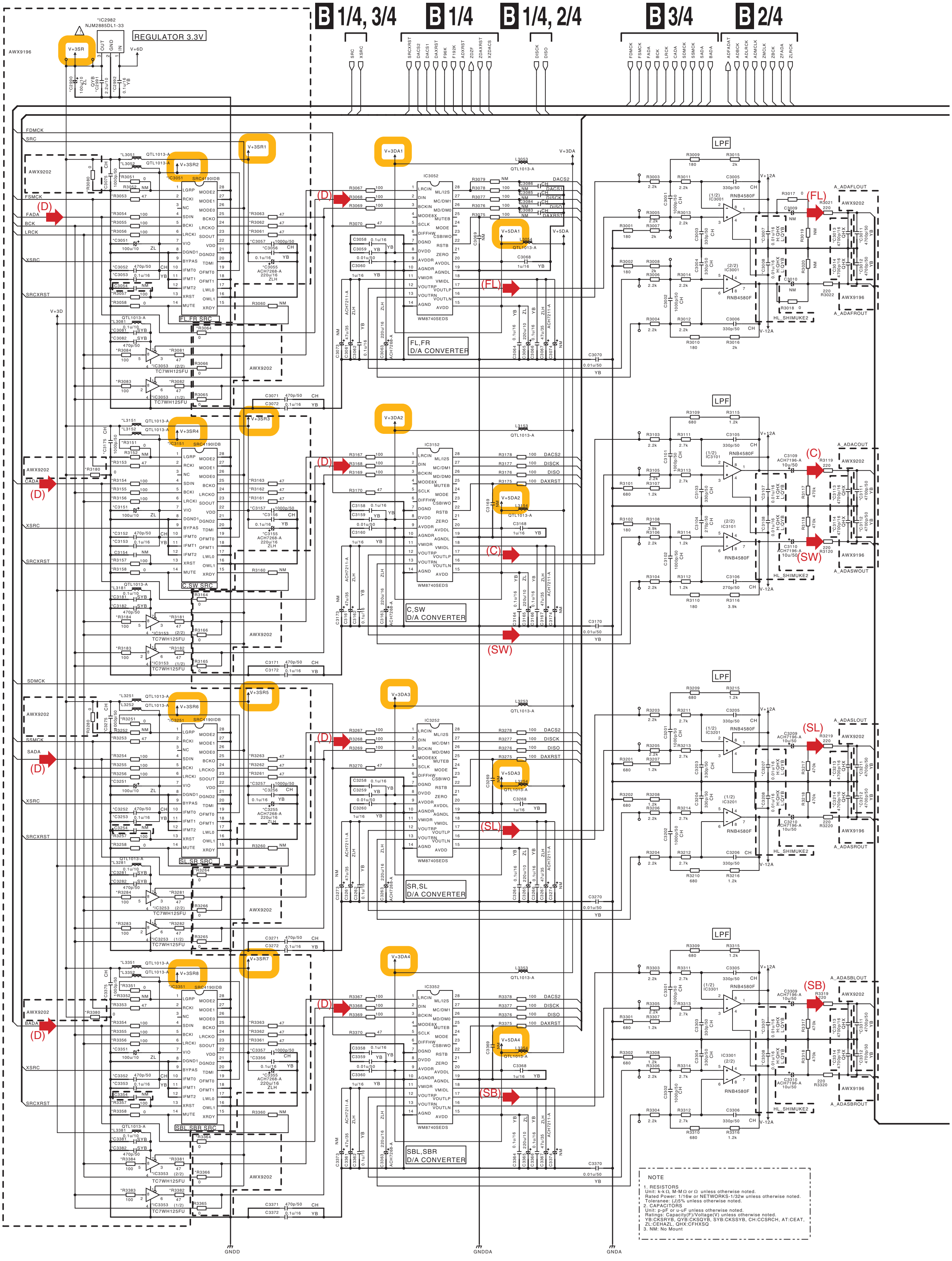
HL_SHIMUKE	R2865
AWX9196-/J	100
AWX9202-/J	47

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

(D) : Audio Data Route

B 3/4

10.5 D-MOTHER ASSY (4/4)


B 1/4, 3/4
B 1/4
B 1/4, 2/4
B 3/4
B 2/4
*IC2982 NJM2885DL1-33
REGULATOR 3.3V
V+3SR
V+6D
AWX9196
AWX9202
V+3SR1
V+3SR2
V+3DA1
V+5DA1
V+5DA
V+3DA
SRC4190IDB
FL,FR SRC
IC3052 WM8740SEDS
FL,FR D/A CONVERTER
LPF
RNB4580F
A_ADAFLOUT
A_ADAFROUT
HL_SHIMUKE2
V+3SR3
V+3SR4
V+3DA2
V+5DA2
C,SW SRC
C,SW D/A CONVERTER
A_ADACOUT
A_ADASWOUT
V+3SR5
V+3SR6
V+3DA3
V+5DA3
SL,SR SRC
SR,SL D/A CONVERTER
A_ADASLOUT
A_ADASROUT
V+3SR7
V+3SR8
V+3DA4
V+5DA4
SBL,SBR SRC
SBL,SBR D/A CONVERTER
A_ADASBLOUT
A_ADASBROUT
(D)
(FL)
(C)
(SW)
(SL)
(SB)
V+12A
V-12A
TC7WH125FU
GNDD
GNDDA
GNDA

NOTE

1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w or NETWORKS-1/32w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB, SYB:CKSSYB, CH:CCSRCH, AT:CEAT, ZL:CEHAZL, QHX:CFHXSQ
3. NM: No Mount

B 4/4

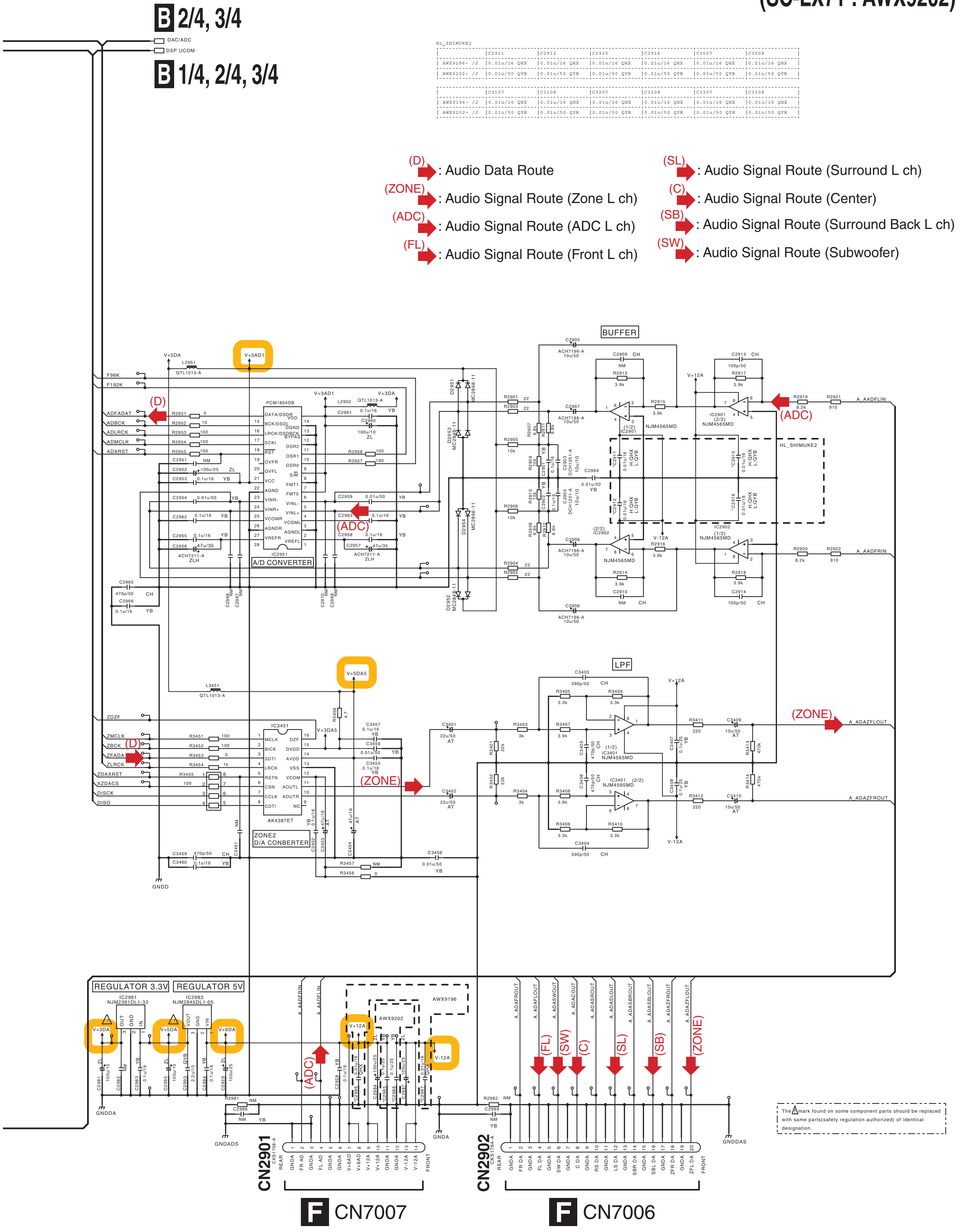
B 4/4 D-MOTHER ASSY (SC-LX81 : AWX9196) (SC-LX71 : AWX9202)

HL_SHIMUKE2

	C2911	C2912	C2915	C2916	C3007	C3008
AWX9196- /J	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX
AWX9202- /J	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB

	C3107	C3108	C3207	C3208	C3307	C3308
AWX9196- /J	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX
AWX9202- /J	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB

(D) ➡	: Audio Data Route
(ZONE) ➡	: Audio Signal Route (Zone L ch)
(ADC) ➡	: Audio Signal Route (ADC L ch)
(FL) ➡	: Audio Signal Route (Front L ch)
(SL) ➡	: Audio Signal Route (Surround L ch)
(C) ➡	: Audio Signal Route (Center)
(SB) ➡	: Audio Signal Route (Surround Back L ch)
(SW) ➡	: Audio Signal Route (Subwoofer)

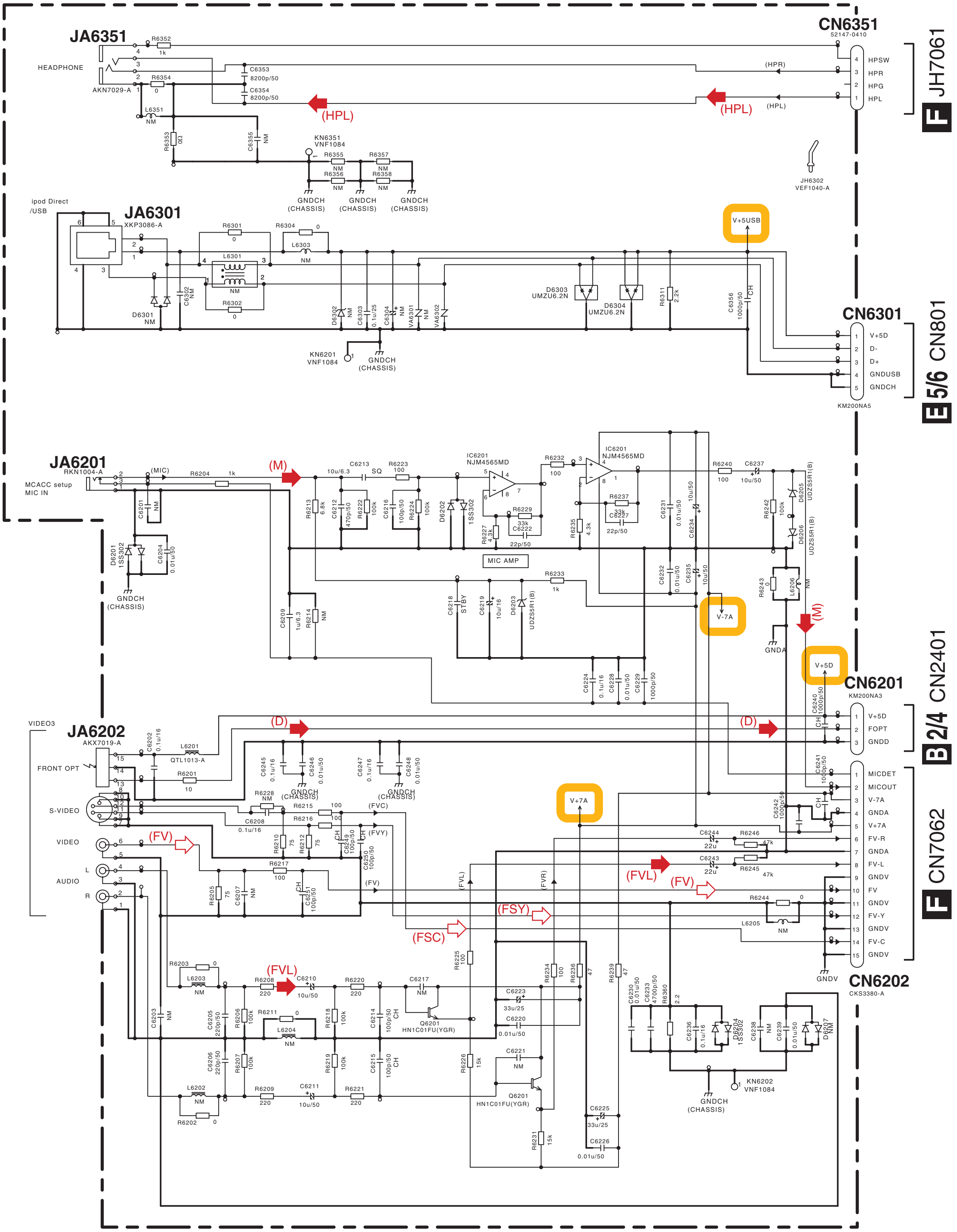


B 2/4, 3/4
DAC/ADC
DSP UCOM
B 1/4, 2/4, 3/4
V+5DA
L2951
QTL1013-A
V+5AD1
F96K
F192K
ADFADAT
ADBCK
ADLRCK
ADMCLK
ADXRST
(D)
PCM1804DB
IC2951
A/D CONVERTER
V+3AD1
V+3DA
L2952
QTL1013-A
ACH7211-A
ZLH
(ADC)
D2951
D2952
D2953
D2954
MC2848-11
BUFFER
C2905
ACH7196-A
10u/50
R2913
3.9k
R2915
R2917
R2919
8.2k
R2921
910
A_AADFLIN
V+12A
IC2901
(1/2)
(2/2)
NJM4565MD
IC2902
HL_SHIMUKE2
V-12A
R2920
R2922
A_AADFRIN
LPF
V+5DA5
L3451
QTL1013-A
ZDZF
ZMCLK
ZBCK
ZFADA
ZLRCK
ZDAXRST
XZDACS
DISCK
DISO
IC3451
AK4387ET
ZONE2
D/A CONBERTER
(ZONE)
V+3DA5
IC3401
NJM4565MD
A_ADAZFLOUT
A_ADAZFROUT
GNDD
REGULATOR 3.3V
REGULATOR 5V
IC2981
NJM2391DL1-33
IC2983
NJM2845DL1-05
V+3DA
V+5DA
V+6DA
GNDDA
GNDADS
AWX9196
AWX9202
V+12A
V-12A
A_AADFRIN
A_AADFLIN
A_ADAFROUT
A_ADAFLOUT
A_ADASWOUT
A_ADACOUT
A_ADASROUT
A_ADASLOUT
A_ADASBROUT
A_ADASBLOUT
A_ADAZFROUT
A_ADAZFLOUT
(FL)
(SW)
(C)
(SL)
(SB)
(ZONE)
GNDA
GNDDAS
CN2901
CKS3788-A
REAR
GNDA
FR AD
GNDA
FL AD
GNDA
GNDA
V+6AD
V+6AD
V+12A
V+12A
GNDA
GNDA
V-12A
V-12A
FRONT
CN2902
CKS3764-A
REAR
GNDA
FR DA
GNDA
FL DA
GNDA
SW DA
GNDA
C DA
GNDA
RS DA
GNDA
LS DA
GNDA
SBR DA
GNDA
SBL DA
GNDA
ZFR DA
GNDA
ZFL DA
FRONT
F CN7007
F CN7006

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

10.6 FRONT IN and V-BRIDGE ASSYS

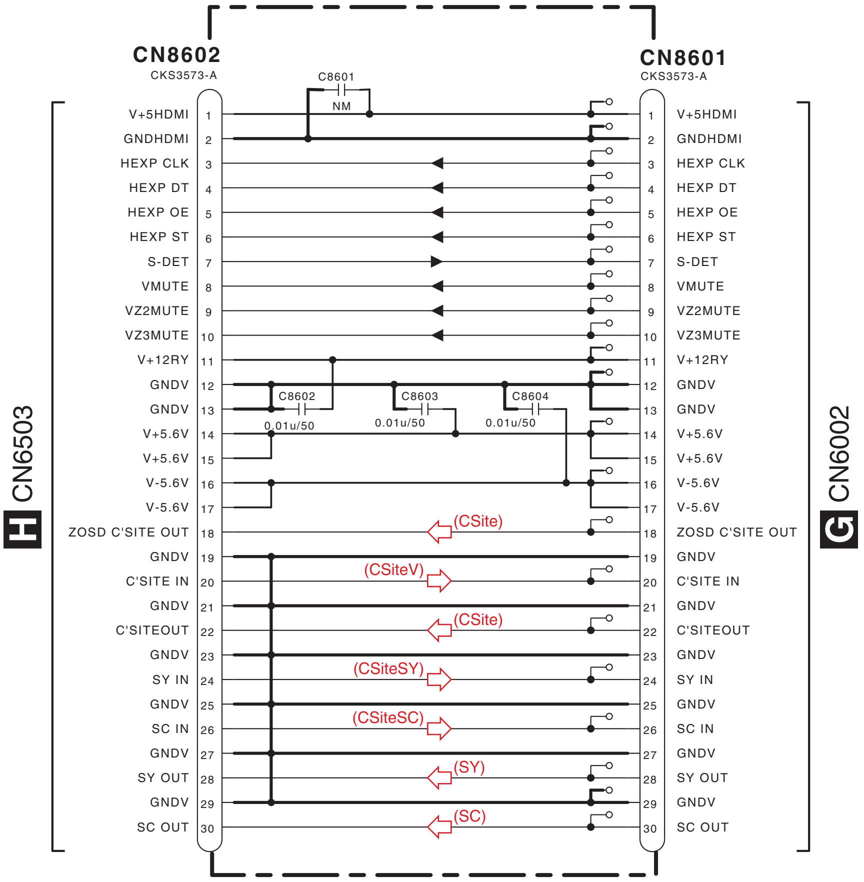
C FRONT IN ASSY (AWX9142)



JA6351
HEADPHONE
AKN7029-A
R6352 1k
R6354 0
C6353 8200p/50
C6354 8200p/50
L6351 NM
R6353 0Ω
C6355 NM
(HPL)
(HPR)
CN6351
52147-0410
HPSW
HPR
HPG
HPL
F JH7061
JH6302
VEF1040-A
KN6351
VNF1084
R6355 NM
R6356 NM
R6357 NM
R6358 NM
GNDCH (CHASSIS)
ipod Direct /USB
JA6301
XKP3086-A
R6301 0
R6304 0
L6303 NM
L6301
R6302 0
C6302 NM
D6301 NM
D6302 NM
C6303 0.1u/25
C6304 NM
VA6301 NM
VA6302
D6303 UMZU6.2N
D6304 UMZU6.2N
R6311 2.2k
C6356 1000p/50 CH
V+5USB
KN6201
VNF1084
CN6301
V+5D
D-
D+
GNDUSB
GNDCH
KM200NA5
E 5/6 CN801
JA6201
RKN1004-A
MCACC setup MIC IN
(MIC)
R6204 1k
(M)
C6201 NM
D6201 1SS302
C6204 0.01u/50
C6213 10u/6.3 SQ
R6223 100
IC6201 NJM4565MD
R6213 6.8k
C6212 470p/50
R6222 100k
C6216 100p/50
R6224 100k
D6202 1SS302
R6227 4.3k
R6229 33k
C6222 22p/50
MIC AMP
R6232 100
R6235 4.3k
R6237 33k
C6227 22p/50
C6231 0.01u/50
C6234 10u/50
R6240 100
C6237 10u/50
R6242 100k
D6205 UDZS5R1(B)
D6206 UDZS5R1(B)
R6233 1k
C6232 0.01u/50
C6235 10u/50
V-7A
R6243 0
L6206 NM
GNDA
C6209 1u/6.3
R6214 NM
C6218 STBY
C6219 10u/16
D6203 UDZS5R1(B)
C6224 0.1u/16
C6228 0.01u/50
C6229 1000p/50
V+5D
CN6201
KM200NA3
C6240 1000p/50 CH
V+5D
FOPT
GNDD
B 2/4 CN2401
VIDEO3
JA6202
AKX7019-A
FRONT OPT
S-VIDEO
VIDEO
AUDIO
L
R
C6202 0.1u/16
L6201 QTL1013-A
R6201 10
(D)
C6245 0.1u/16
C6246 0.01u/50
C6247 0.1u/16
C6248 0.01u/50
R6228 NM
C6208 0.1u/16
R6215 100
R6216 100
(FVC)
(FVY)
R6210 75
R6212 75
C6249 100p/50 CH
C6250 100p/50 CH
R6217 100
R6205 75
C6207 NM
C6251 100p/50 CH
(FV)
(FVL)
(FVR)
(FSY)
(FSC)
V+7A
C6244 22u
C6243 22u
R6246 47k
R6245 47k
R6244 0
L6205 NM
C6241 1000p/50 CH
C6242 1000p/50 CH
MICDET
MICOUT
V-7A
GNDA
V+7A
FV-R
GNDA
FV-L
GNDV
FV
GNDV
FV-Y
GNDV
FV-C
GNDV
F CN7062
CN6202
CKS3380-A
R6203 0
L6203 NM
C6203 NM
R6208 220
C6210 10u/50
R6220 220
C6217 NM
Q6201 HN1C01FU(YGR)
C6205 220p/50
R6206 100k
R6211 0
L6204 NM
R6218 100k
C6214 100p/50 CH
C6223 33u/25
C6220 0.01u/50
R6225 100
R6234 100
R6236 47
R6239 47
C6230 0.01u/50
C6233 4700p/50
R6360 2.2
C6236 0.1u/16
D6204 1SS302
C6238 NM
C6239 0.01u/50
D6207 NM
C6206 220p/50
R6207 100k
R6219 100k
C6215 100p/50 CH
R6226 15k
C6221 NM
Q6201 HN1C01FU(YGR)
L6202 NM
R6202 0
R6209 220
C6211 10u/50
R6221 220
C6225 33u/25
C6226 0.01u/50
R6231 15k
KN6202 VNF1084
GNDCH (CHASSIS)

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Tolerance: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH
NO MARKED : CKSRYB
3. NM: No Mount

J V-BRIDGE ASSY (AWX9161)

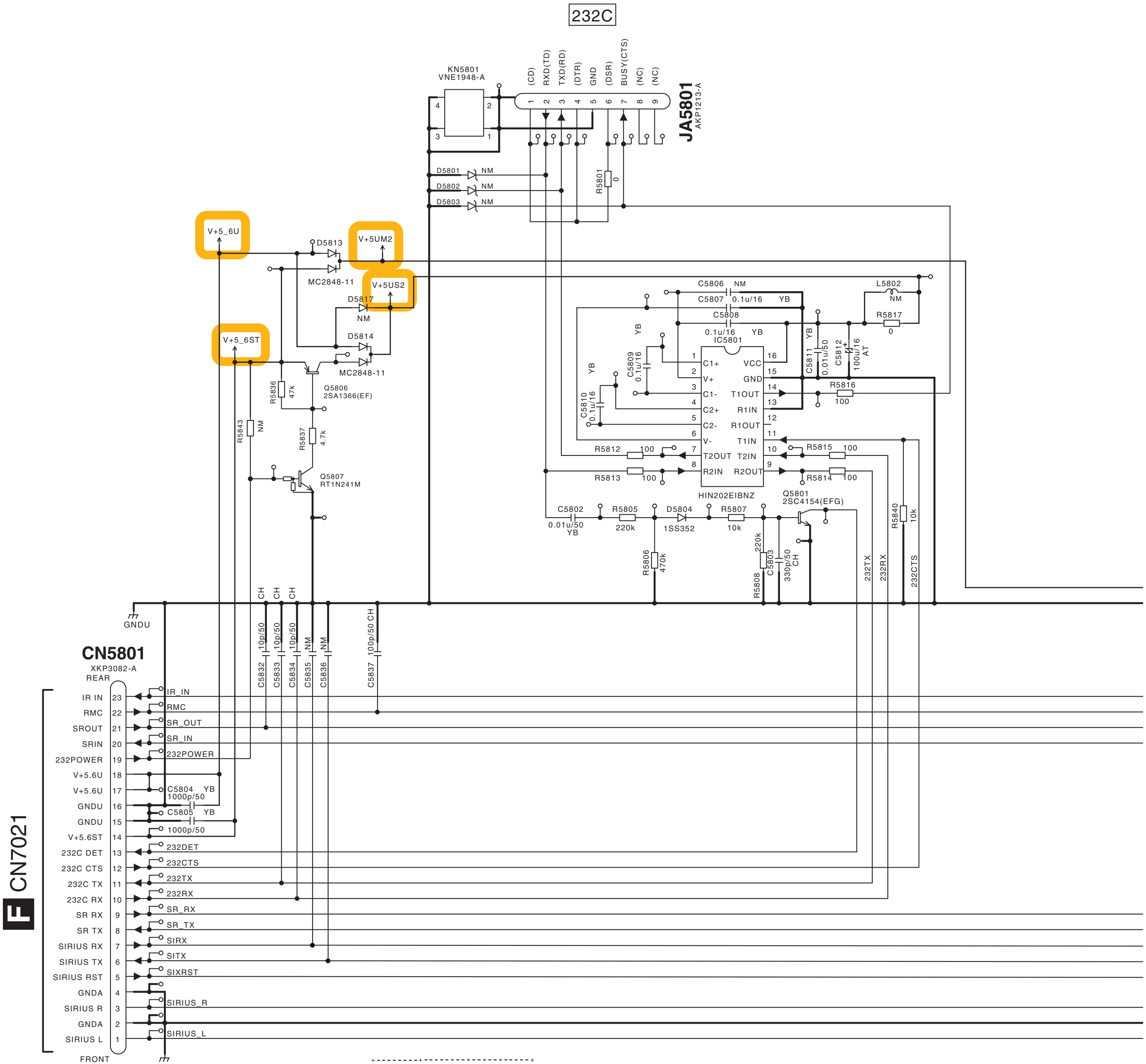

CN8602
CKS3573-A
C8601
NM
CN8601
CKS3573-A
H CN6503
G CN6002
V+5HDMI 1
GNDHDMI 2
HEXP CLK 3
HEXP DT 4
HEXP OE 5
HEXP ST 6
S-DET 7
VMUTE 8
VZ2MUTE 9
VZ3MUTE 10
V+12RY 11
GNDV 12
GNDV 13
V+5.6V 14
V+5.6V 15
V-5.6V 16
V-5.6V 17
ZOSD C'SITE OUT 18
GNDV 19
C'SITE IN 20
GNDV 21
C'SITEOUT 22
GNDV 23
SY IN 24
GNDV 25
SC IN 26
GNDV 27
SY OUT 28
GNDV 29
SC OUT 30
C8602
0.01u/50
C8603
0.01u/50
C8604
0.01u/50
(CSite)
(CSiteV)
(CSite)
(CSiteSY)
(CSiteSC)
(SY)
(SC)
1 V+5HDMI
2 GNDHDMI
3 HEXP CLK
4 HEXP DT
5 HEXP OE
6 HEXP ST
7 S-DET
8 VMUTE
9 VZ2MUTE
10 VZ3MUTE
11 V+12RY
12 GNDV
13 GNDV
14 V+5.6V
15 V+5.6V
16 V-5.6V
17 V-5.6V
18 ZOSD C'SITE OUT
19 GNDV
20 C'SITE IN
21 GNDV
22 C'SITEOUT
23 GNDV
24 SY IN
25 GNDV
26 SC IN
27 GNDV
28 SY OUT
29 GNDV
30 SC OUT

NOTE
1. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
2. NM: No Mount

(FSC) ⇨ : S-Video Signal Route (Front C)
(FSY) ⇨ : S-Video Signal Route (Front Y)
(FV) ⇨ : Video Signal Route (Video)
(D) ➡ : Audio Data Route
(FVL) ➡ : Audio Signal Route (Video L ch)
(M) ➡ : Audio Signal Route (Mic)
(HPL) ➡ : Audio Signal Route (Headphone L ch)

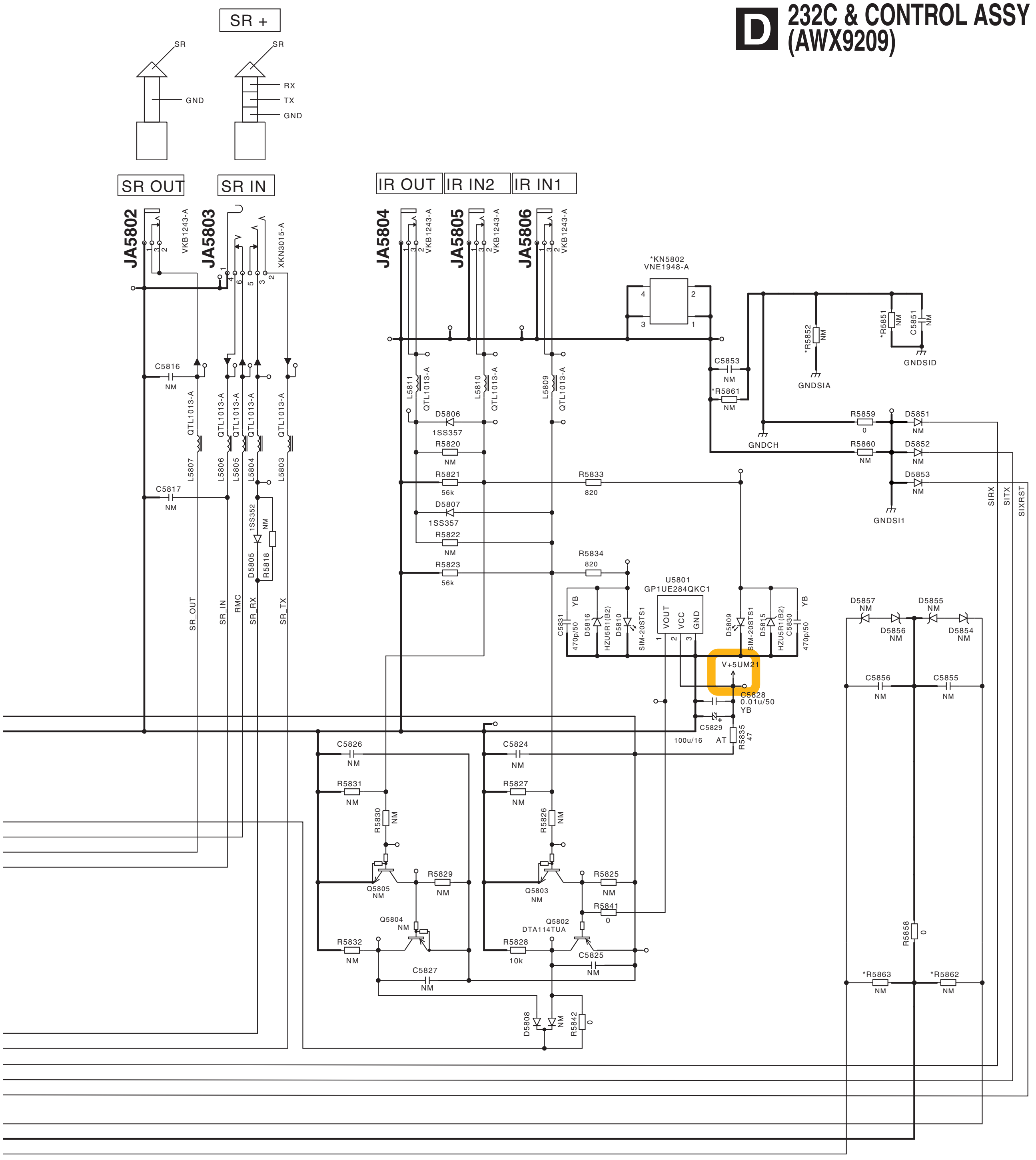
(SC) ⇨ : S-Video Signal Route (C)
(SY) ⇨ : S-Video Signal Route (Y)
(CSiteSC) ⇨ : Video Signal Route (Composite C)
(CSiteSY) ⇨ : Video Signal Route (Composite Y)
(CSiteV) ⇨ : Video Signal Route (Composite Video)
(CSite) ⇨ : Video Signal Route (Composite)

10.7 232C & CONTROL ASSY


232C
KN5801
VNE1948-A
JA5801
AKP1213-A
(CD)
RXD(TD)
TXD(RD)
(DTR)
GND
(DSR)
BUSY(CTS)
(NC)
(NC)
R5801
0
D5801 NM
D5802 NM
D5803 NM
V+5_6U
V+5UM2
V+5US2
V+5_6ST
D5813
MC2848-11
D5817
NM
D5814
MC2848-11
R5836
47k
Q5806
2SA1366(EF)
R5843
NM
R5837
4.7k
Q5807
RT1N241M
C5806 NM
C5807 0.1u/16 YB
C5808
0.1u/16 YB
IC5801
HIN202EIBNZ
C1+
V+
C1-
C2+
C2-
V-
T2OUT
R2IN
VCC
GND
T1OUT
R1IN
R1OUT
T1IN
T2IN
R2OUT
C5809
0.1u/16
YB
C5810
0.1u/16
YB
C5811
0.01u/50
YB
C5812
100u/16
AT
L5802
NM
R5817
0
R5816
100
R5812 100
R5813 100
R5815 100
R5814 100
C5802
0.01u/50
YB
R5805
220k
D5804
1SS352
R5807
10k
Q5801
2SC4154(EFG)
R5806
470k
R5808
220k
C5803
330p/50
CH
R5840
10k
232TX
232RX
232CTS
GNDU
CN5801
XKP3082-A
REAR
FRONT
GNDA
C5832 10p/50 CH
C5833 10p/50 CH
C5834 10p/50 CH
C5835 NM
C5836 NM
C5837 100p/50 CH
C5804 YB
1000p/50
C5805 YB
1000p/50
IR IN 23
RMC 22
SROUT 21
SRIN 20
232POWER 19
V+5.6U 18
V+5.6U 17
GNDU 16
GNDU 15
V+5.6ST 14
232C DET 13
232C CTS 12
232C TX 11
232C RX 10
SR RX 9
SR TX 8
SIRIUS RX 7
SIRIUS TX 6
SIRIUS RST 5
GNDA 4
SIRIUS R 3
GNDA 2
SIRIUS L 1
IR_IN
RMC
SR_OUT
SR_IN
232POWER
232DET
232CTS
232TX
232RX
SR_RX
SR_TX
SIRX
SITX
SIXRST
SIRIUS_R
SIRIUS_L
F CN7021

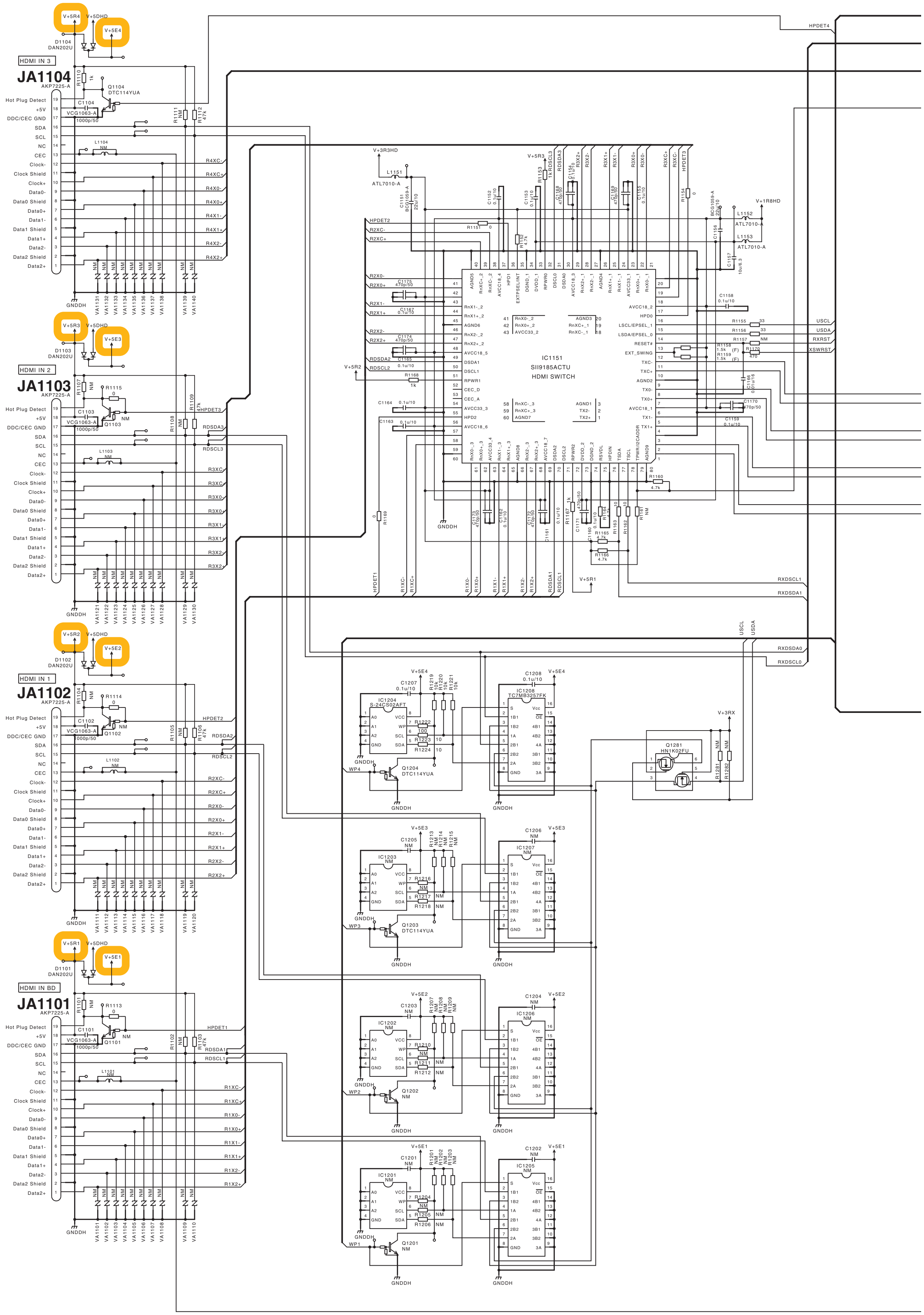
	SC-LX81 SC-LX71	/HYS
	AWX9209- /J	
C5852	NM	
C5857	NM	
C5858	NM	
R5851	0	
R5852	0	
R5853	NM	
R5854	NM	
R5855	NM	
R5856	NM	
R5857	NM	
R5861	0	
R5862	0	
R5863	0	
D5858	NM	
JA5807	NM	
KN5802	VNE1948-A	

D 232C & CONTROL ASSY (AWX9209)


SR +
SR
GND
SR
RX
TX
GND
SR OUT
SR IN
JA5802
VKB1243-A
JA5803
XKN3015-A
IR OUT
IR IN2
IR IN1
JA5804
VKB1243-A
JA5805
VKB1243-A
JA5806
VKB1243-A
*KN5802
VNE1948-A
C5816
NM
C5817
NM
QTL1013-A
L5807
L5806
L5805
L5804
L5803
1SS352
D5805
NM
R5818
SR_OUT
SR_IN
RMC
SR_RX
SR_TX
L5811
L5810
L5809
D5806
1SS357
R5820
NM
R5821
56k
D5807
1SS357
R5822
NM
R5823
56k
R5833
820
R5834
820
U5801
GP1UE284QKC1
VOUT
VCC
GND
C5831
470p/50
YB
D5816
HZU5R1(B2)
D5810
SIM-20STS1
D5809
SIM-20STS1
D5815
HZU5R1(B2)
C5830
470p/50
YB
V+5UM21
C5828
0.01u/50
YB
C5829
100u/16
AT
R5835
47
C5853
NM
*R5861
NM
*R5852
NM
GNDSIA
*R5851
NM
C5851
NM
GNDSID
GNDCH
R5859
0
R5860
NM
D5851
NM
D5852
NM
D5853
NM
GNDSI1
SIRX
SITX
SIXRST
D5857
NM
D5855
NM
D5856
NM
D5854
NM
C5856
NM
C5855
NM
R5858
0
*R5863
NM
*R5862
NM
C5826
NM
R5831
NM
R5830
NM
Q5805
NM
R5829
NM
Q5804
NM
R5832
NM
C5827
NM
C5824
NM
R5827
NM
R5826
NM
Q5803
NM
R5825
NM
R5841
0
Q5802
DTA114TUA
R5828
10k
C5825
NM
D5808
NM
R5842
0

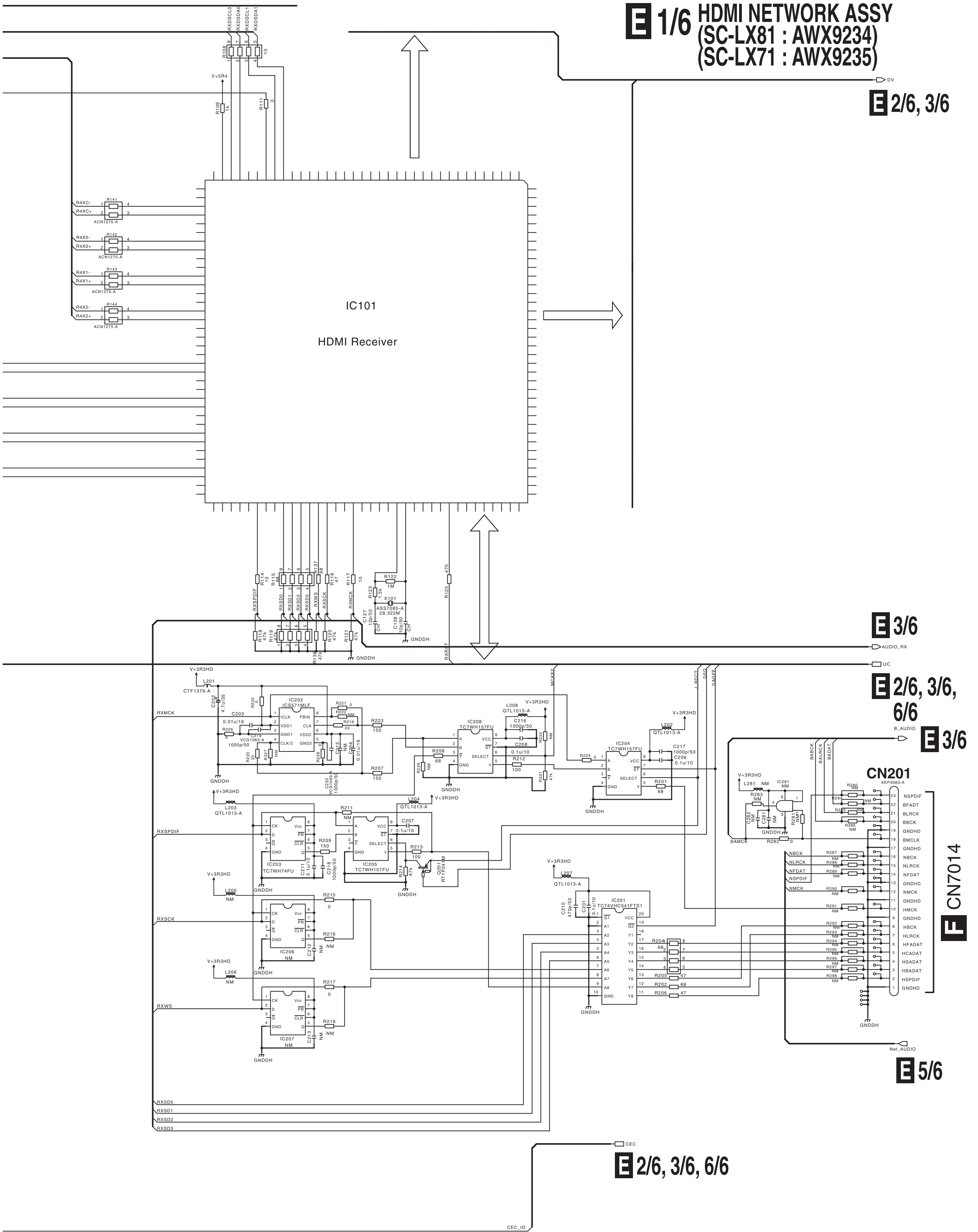
NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, CH:CCSRCH, AT:CEAT
3. NM: No Mount

10.8 HDMI NETWORK ASSY (1/6)

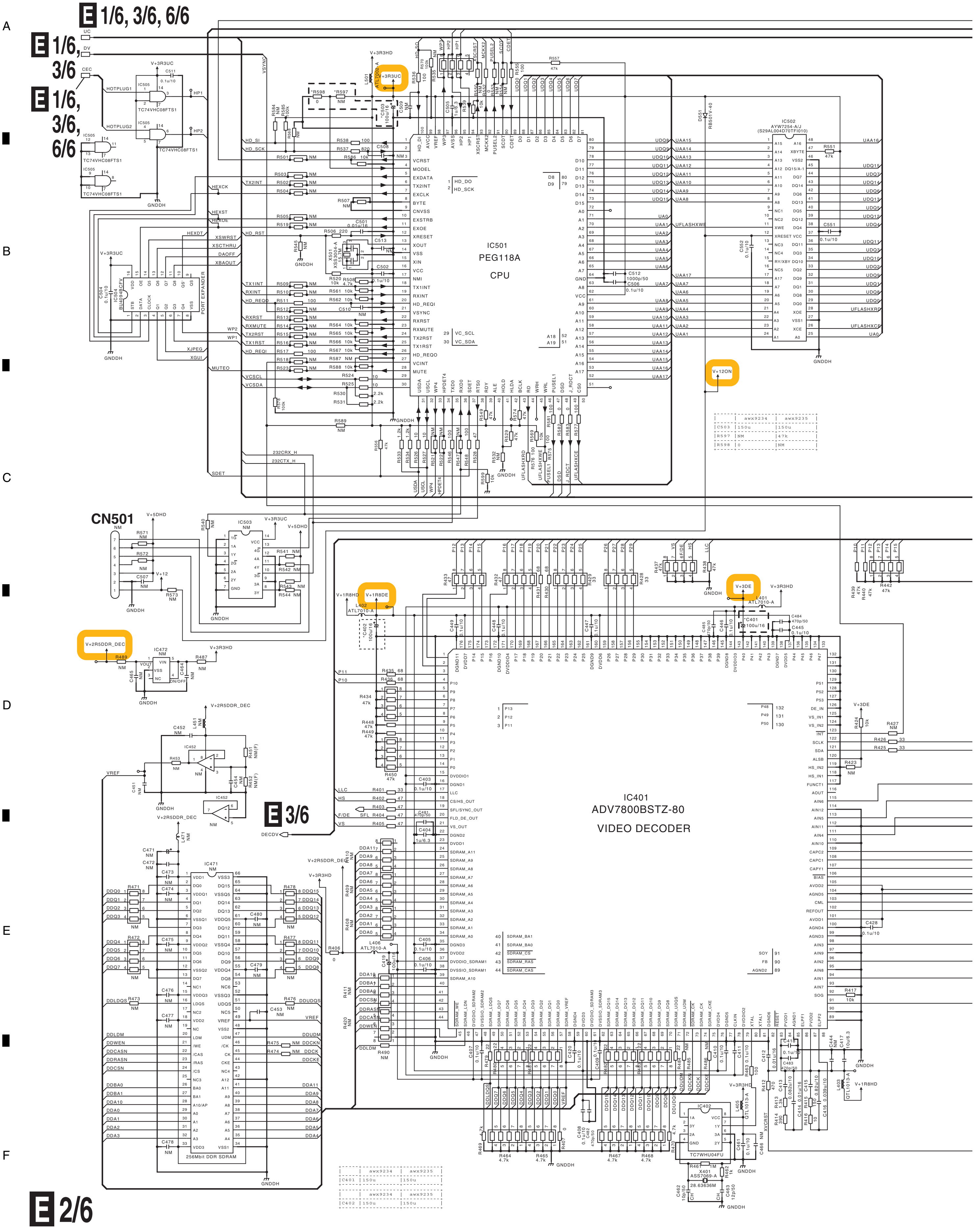


HDMI IN 3
JA1104
AKP7225-A
HDMI IN 2
JA1103
AKP7225-A
HDMI IN 1
JA1102
AKP7225-A
HDMI IN BD
JA1101
AKP7225-A
Hot Plug Detect
+5V
DDC/CEC GND
SDA
SCL
NC
CEC
Clock-
Clock Shield
Clock+
Data0-
Data0 Shield
Data0+
Data1-
Data1 Shield
Data1+
Data2-
Data2 Shield
Data2+
V+5R4
V+5R3
V+5R2
V+5R1
V+5DHD
V+5E4
V+5E3
V+5E2
V+5E1
D1104 DAN202U
D1103 DAN202U
D1102 DAN202U
D1101 DAN202U
Q1104 DTC114YUA
Q1103
Q1102
Q1101
VCG1063-A
GNDDH
IC1151
SII9185ACTU
HDMI SWITCH
V+3R3HD
V+1R8HD
L1151 ATL7010-A
L1152 ATL7010-A
L1153 ATL7010-A
HPDET4
HPDET3
HPDET2
HPDET1
RDSDA3
RDSCL3
RDSDA2
RDSCL2
RDSDA1
RDSCL1
RXDSCL1
RXDSDA1
RXDSDA0
RXDSCL0
USCL
USDA
RXRST
XSWRST
V+3RX
Q1281 HN1K02FU
IC1204 S-24CS02AFT
IC1208 TC7MB3257FK
IC1203 NM
IC1207 NM
IC1202 NM
IC1206 NM
IC1201 NM
IC1205 NM
Q1204 DTC114YUA
Q1203 DTC114YUA
Q1202 NM
Q1201 NM
WP4
WP3
WP2
WP1

E 1/6 HDMI NETWORK ASSY
(SC-LX81 : AWX9234)
(SC-LX71 : AWX9235)


IC101
HDMI Receiver
RXDSCL0
RXDSDA0
RXDSCL1
RXDSDA1
R108 10
V+5R4
R109 1k
R111 0
R4XC-
R4XC+
R141 ACN1275-A
R4X0-
R4X0+
R142 ACN1275-A
R4X1-
R4X1+
R143 ACN1275-A
R4X2-
R4X2+
R144 ACN1275-A
DV
E 2/6, 3/6
RXSPDIF
RXSD0
RXSD1
RXSD2
RXSD3
RXWS
RXSCK
RXMCK
R114
R115
R137 68
R116 47
R117 10
R122 1M
R123 1.5k
X101 ASS7085-A 28.322M
C127 12p/50 CH
C128 10p/50 CH
R125 470
R118 47k
R119 47k
R136 47k
R120 47k
R121 47k
GNDDH
RXRST
E 3/6
AUDIO_RX
UC
E 2/6, 3/6, 6/6
V+3R3HD
L201 CTF1379-A
C202 4.7u/35
IC202 ICS571MLF
ICLK FBIN VDD1 CLK GND1 VDD2 CLK/2 GND2
C203 0.01u/16
R226 0
C219 VCG1063-A 1000p/50
R225 0
R220 33
R227 NM
R221 0
R222 NM
R219 33
R228 NM
C215 NM
C204 0.01u/16
C220 VCG1063-A 1000p/50
R223 150
R207 150
L208 QTL1013-A
IC208 TC7WH157FU
C216 1000p/50
C208 0.1u/10
R230 NM
R208 68
R229 NM
R212 100
R231 47k
MCKX2
SELECT
V+3R3HD
R224 0
IC204 TC7WH157FU
C217 1000p/50
C206 0.1u/10
R201 68
L202 QTL1013-A
L.RDCT
DSD
DAOFF
B_AUDIO
E 3/6
L203 QTL1013-A
IC203 TC7WH74FU
CK Vcc D PR Q CLR GND Q
R209 150
C211 0.1u/10
C218 1000p/50
R211 NM
L204 QTL1013-A
IC205 TC7WH157FU
C207 0.1u/10
R213 100
R214 47k
Q201 RT1P241M
L205 NM
R215 0
R216 NM
IC206 NM
C212 NM
L206 NM
R217 0
R218 NM
IC207 NM
C213 NM
L207 QTL1013-A
C210 470p/50
C201 0.1u/10
IC201 TC74VHC541FTS1
G1 A1 A2 A3 A4 A5 A6 A7 A8 GND VCC G2 Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8
R204 68
R205 47
R202 68
R206 47
BALCK
BALRCK
BADAT
BAMCK
V+3R3HD
L281 NM
R283 NM
IC281 NM
C282 NM
C281 NM
R281 NM
R282 0
R280 NM
R284 NM
R285 NM
R286 NM
CN201
XKP3083-A
NSPDIF
BFADT
BLRCK
BBCK
GNDHD
BMCLK
GNDHD
NBCK
NLRCK
NFDAT
GNDHD
NMCK
GNDHD
HMCK
GNDHD
HBCK
HLRCK
HFADAT
HCADAT
HSADAT
HBADAT
HSPDIF
GNDHD
NBCK NLRCK NFDAT NSPDIF NMCK
R287 NM R288 NM R289 NM R290 NM R291 NM R292 NM R293 NM R294 NM R295 NM R296 NM R297 NM R298 NM
F CN7014
Net_AUDIO
E 5/6
CEC
E 2/6, 3/6, 6/6
CEC_IO

10.9 HDMI NETWORK ASSY (2/6)


1
2
3
4
A
B
C
D
E
F
E 1/6, 3/6, 6/6
E 1/6, 3/6
E 1/6, 3/6, 6/6
UC
DV
CEC
HOTPLUG1
HOTPLUG2
HP1
HP2
TC74VHC08FTS1
IC505
V+3R3UC
GNDDH
IC504
BU4094BCFV
PORT EXPANDER
IC501
PEG118A
CPU
IC502
AYW7254-A/J
(S29AL004D70TFI010)
V+12ON
CN501
IC503
V+5DHD
IC472
V+2R5DDR_DEC
IC452
IC471
256Mbit DDR SDRAM
V+1R8HD
V+1R8DE
ATL7010-A
V+3DE
V+3R3HD
IC401
ADV7800BSTZ-80
VIDEO DECODER
IC402
TC7WHU04FU
X401
ASS7069-A
28.63636M
E 3/6
DECDV
E 2/6

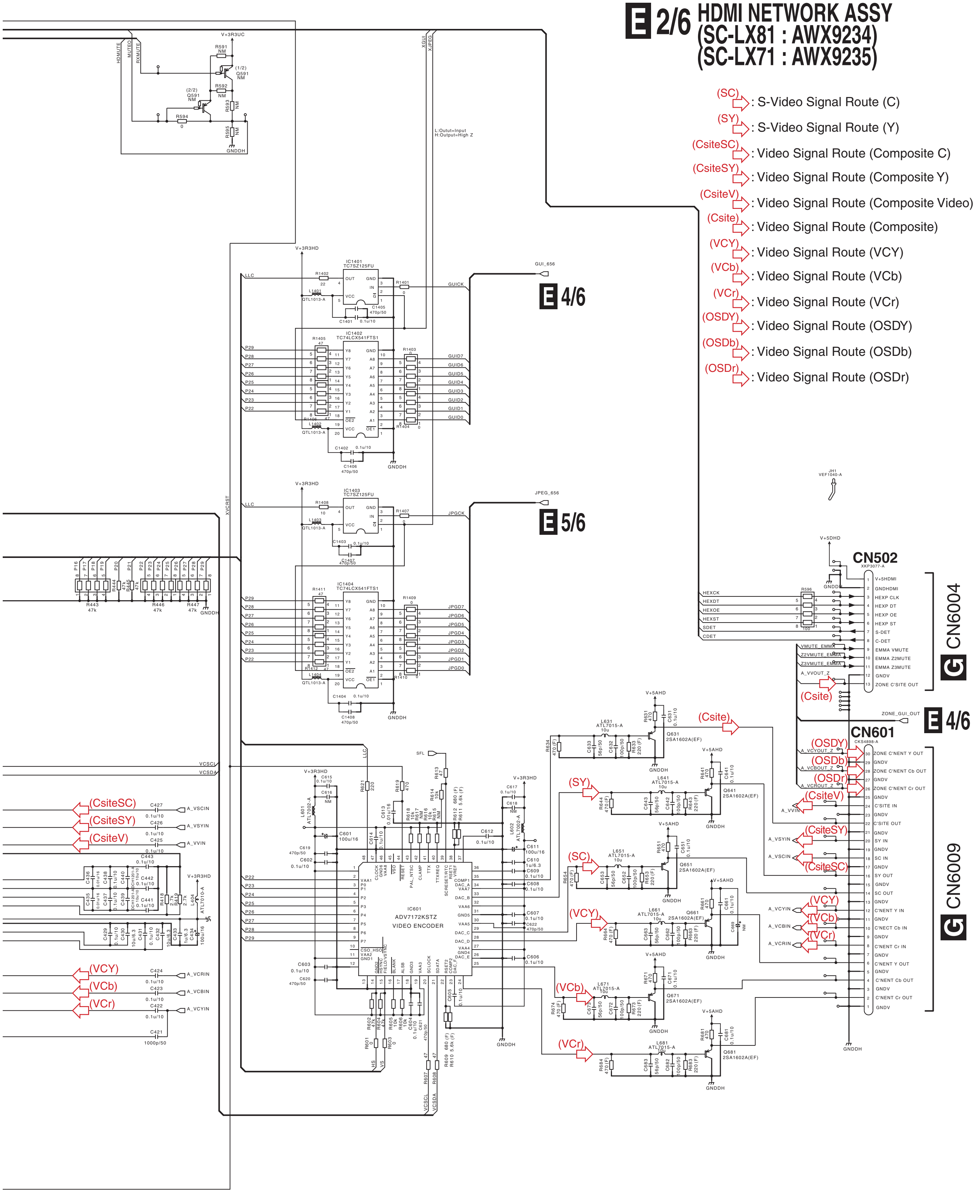
	awx9234	awx9235
C503	150u	150u
R597	NM	47k
R598	0	NM

	awx9234	awx9235
C401	150u	150u

	awx9234	awx9235
C402	150u	150u

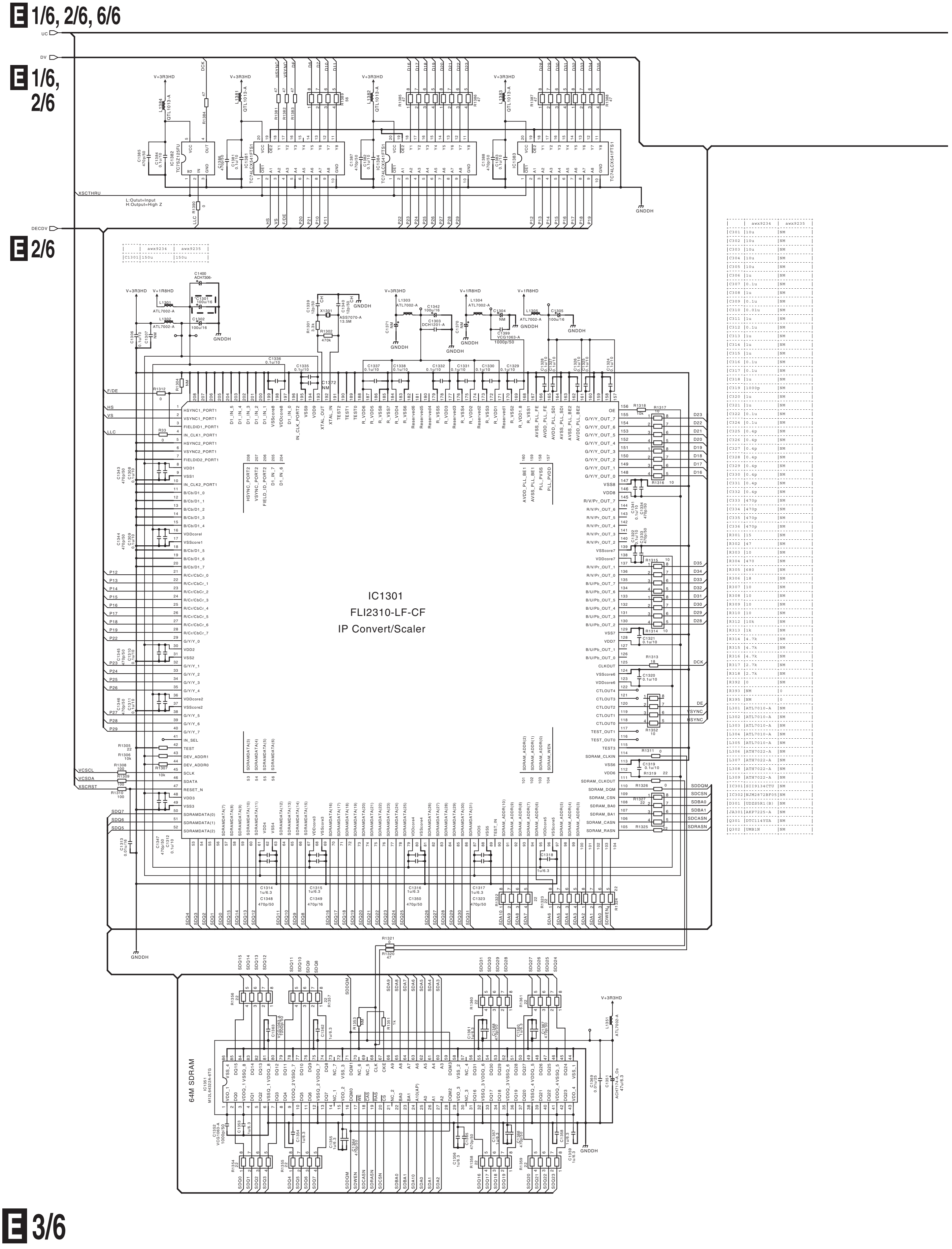
E 2/6 HDMI NETWORK ASSY
(SC-LX81 : AWX9234)
(SC-LX71 : AWX9235)

(SC) : S-Video Signal Route (C)
(SY) : S-Video Signal Route (Y)
(CsiteSC) : Video Signal Route (Composite C)
(CsiteSY) : Video Signal Route (Composite Y)
(CsiteV) : Video Signal Route (Composite Video)
(Csite) : Video Signal Route (Composite)
(VCY) : Video Signal Route (VCY)
(VCb) : Video Signal Route (VCb)
(VCr) : Video Signal Route (VCr)
(OSDY) : Video Signal Route (OSDY)
(OSDb) : Video Signal Route (OSDb)
(OSDr) : Video Signal Route (OSDr)



HDMUTE
MUTEO
RXMUTE
V+3R3UC
R591 NM
(1/2) Q591 NM
R592 NM
(2/2) Q591 NM
R593 NM
R594 0
R595 NM
GNDDH
XGUI
XJPEG
L:Outut=Input
H:Output=High Z
V+3R3HD
IC1401 TC7SZ125FU
R1402 22
L1401 QTL1013-A
R1401 0
C1405 470p/50
C1401 0.1u/10
GUICK
GUI_656
E 4/6
IC1402 TC74LCX541FTS1
R1405 47
R1403 0
R1406 47
R1404 0
L1402 QTL1013-A
C1402 0.1u/10
C1406 470p/50
GUID7
GUID6
GUID5
GUID4
GUID3
GUID2
GUID1
GUID0
GNDDH
JH1 VEF1040-A
IC1403 TC7SZ125FU
R1408 10
L1403 QTL1013-A
R1407 0
C1403 0.1u/10
C1407 470p/50
JPGCK
JPEG_656
E 5/6
XVCRST
R443 47k
R446 47k
R447 47k
IC1404 TC74LCX541FTS1
R1411 47
R1409 0
R1412 47
R1410 0
L1404 QTL1013-A
C1404 0.1u/10
C1408 470p/50
JPGD7
JPGD6
JPGD5
JPGD4
JPGD3
JPGD2
JPGD1
JPGD0
V+5DHD
CN502 XKP3077-A
V+5HDMI
GNDHDMI
HEXP CLK
HEXP DT
HEXP OE
HEXP ST
S-DET
C-DET
EMMA VMUTE
EMMA Z2MUTE
EMMA Z3MUTE
GNDV
ZONE C'SITE OUT
HEXCK
HEXDT
HEXOE
HEXST
SDET
CDET
R596 100
VMUTE_EMMA
Z2VMUTE_EMMA
Z3VMUTE_EMMA
A_VVOUT_Z
G CN6004
(Csite)
ZONE_GUI_OUT
E 4/6
CN601 CKS4898-A
ZONE C'NENT Y OUT
ZONE C'NENT Cb OUT
ZONE C'NENT Cr OUT
C'SITE IN
C'SITE OUT
SY IN
SC IN
SY OUT
SC OUT
C'NENT Y IN
C'NECT Cb IN
C'NENT Cr IN
C'NENT Y OUT
C'NENT Cb OUT
C'NENT Cr OUT
GNDV
G CN6009
A_VCYOUT_Z
A_VCBOUT_Z
A_VCROUT_Z
A_VVIN
A_VSYIN
A_VSCIN
A_VCYIN
A_VCBIN
A_VCRIN
(OSDY)
(OSDb)
(OSDr)
(CsiteV)
(CsiteSY)
(CsiteSC)
(VCY)
(VCb)
(VCr)
V+5AHD
L631 ATL7015-A 10u
R631 470
C631 0.1u/10
Q631 2SA1602A(EF)
R634 470(F)
C633 56p/50
C632 100p/50
R633 220(F)
L641 ATL7015-A 10u
R641 470
C641 0.1u/10
Q641 2SA1602A(EF)
R644 470(F)
C643 56p/50
C642 100p/50
R643 220(F)
(SY)
L651 ATL7015-A 10u
R651 470
C651 0.1u/10
Q651 2SA1602A(EF)
R654 470(F)
C653 56p/50
C652 100p/50
R653 220(F)
(SC)
L661 ATL7015-A 10u
R661 470
C661 0.1u/10
Q661 2SA1602A(EF)
R664 470(F)
C663 56p/50
C662 100p/50
R663 220(F)
C669 NM
L671 ATL7015-A 10u
R671 470
C671 0.1u/10
Q671 2SA1602A(EF)
R674 470(F)
C673 56p/50
C672 100p/50
R673 220(F)
L681 ATL7015-A 10u
R681 470
C681 0.1u/10
Q681 2SA1602A(EF)
R684 470(F)
C683 56p/50
C682 100p/50
R683 220(F)
SFL
VCSCL
VCSDA
LLC
IC601 ADV7172KSTZ VIDEO ENCODER
L601 ATL7002-A
C615 0.1u/10
C616 NM
C601 100u/16
C619 470p/50
C602 0.1u/10
C603 0.1u/10
C620 470p/50
R621 220
R619 470
C613 0.01u/16
C614 0.1u/10
R613 47
R618 10k
R617 NM
R616 NM
R615 NM
R614 10k
R612 680(F)
R611 5.6k(F)
C612 0.1u/10
C617 0.1u/10
C618 NM
L602 ATL7002-A
C611 100u/16
C610 1u/6.3
C609 0.1u/10
C608 0.1u/10
C607 0.1u/10
C622 470p/50
C606 0.1u/10
R602 47
R604 47k
R605 10k
R606 10k
C604 0.1u/10
C621 470p/50
R601 0
R603 0
C605 0.1u/10
R609 680(F)
R610 5.6k(F)
R607 47
R608 47
HS
VS
VCSCL
VCSDA
GNDDH
C427 0.1u/10
C426 0.1u/10
C425 0.1u/10
C443 0.1u/10
C436 0.01u/16
C438 0.1u/10
C440 0.1u/10
C442 0.1u/10
C435 0.01u/16
C437 0.1u/10
C439 0.1u/10
C441 0.1u/10
R418 2.7k
R419 2.7k
L404 ATL7010-A
C429 0.1u/10
C430 0.1u/10
C431 10u/6.3
C432 0.1u/10
C433 1u/6.3
C434 100u/16
C424 0.1u/10
C423 0.1u/10
C422 0.1u/10
C421 1000p/50
A_VSCIN
A_VSYIN
A_VVIN
A_VCRIN
A_VCBIN
A_VCYIN

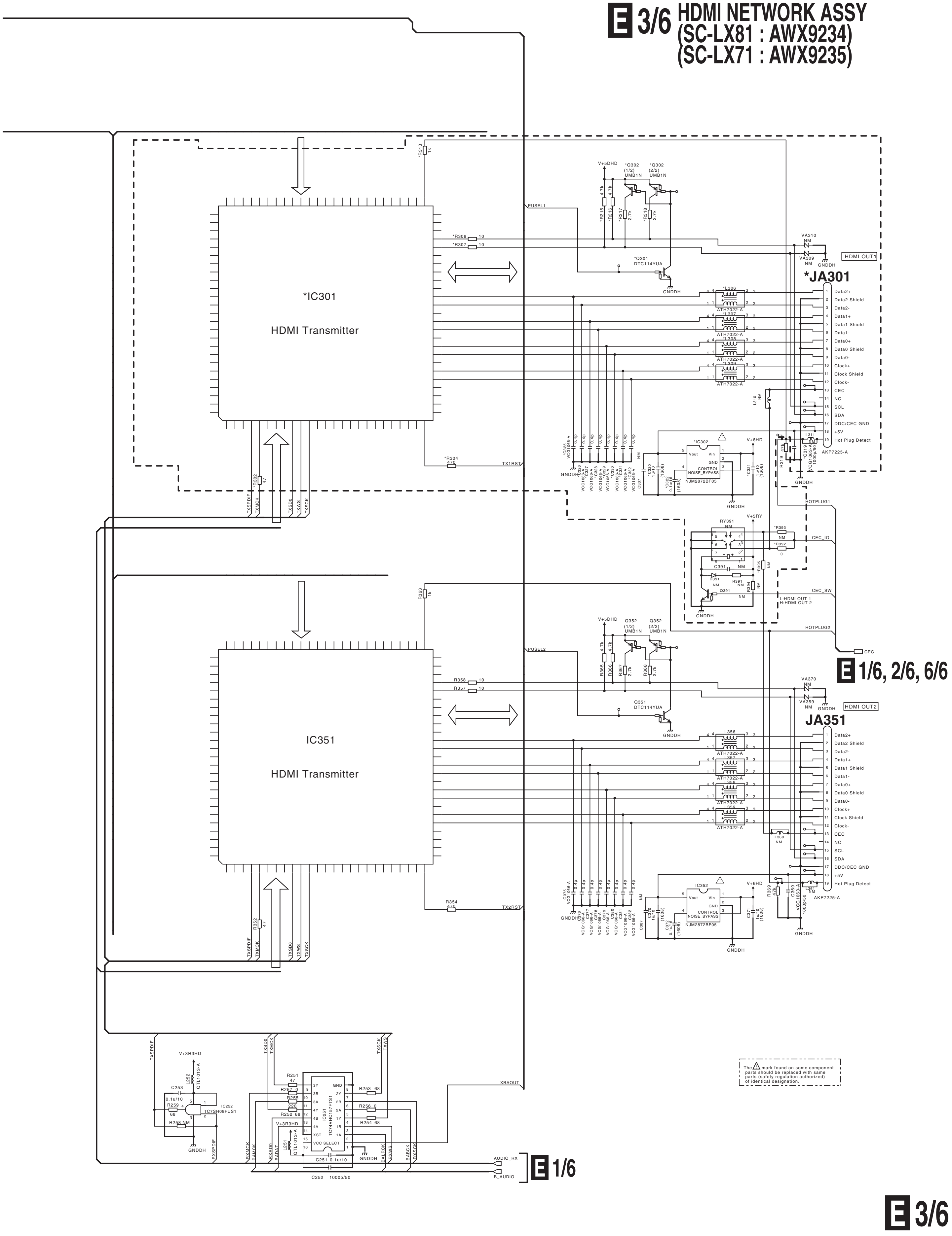
10.10 HDMI NETWORK ASSY (3/6)


E 1/6, 2/6, 6/6
UC
DV
E 1/6, 2/6
DECDV
E 2/6
XSCTHRU
L:Outut=Input
H:Output=High Z
LLC R1390 0
GNDDH
V+3R3HD
V+1R8HD
IC1382 TC7SZ125FU
IC1381 TC74LCX541FTS1
IC1384 TC74LCX541FTS1
IC1383 TC74LCX541FTS1
L1384 QTL1013-A
L1381 QTL1013-A
L1382 QTL1013-A
L1383 QTL1013-A
C1400 ACH7306-
*C1301 100u/16
L1301 ATL7002-A
L1302 ATL7002-A
C1302 100u/16
X1301 ASS7070-A 13.5M
L1303 ATL7002-A
C1342 100u/16
C1303 DCH1201-A
L1304 ATL7002-A
C1304 NM
L1305 ATL7002-A
C1305 100u/16
C1399 VCG1063-A 1000p/50
IC1301
FLI2310-LF-CF
IP Convert/Scaler
VCSCL
VCSDA
XSCRST
64M SDRAM
IC1351
M12L64322A-6TG
L1351 ATL7002-A
V+3R3HD
GNDDH

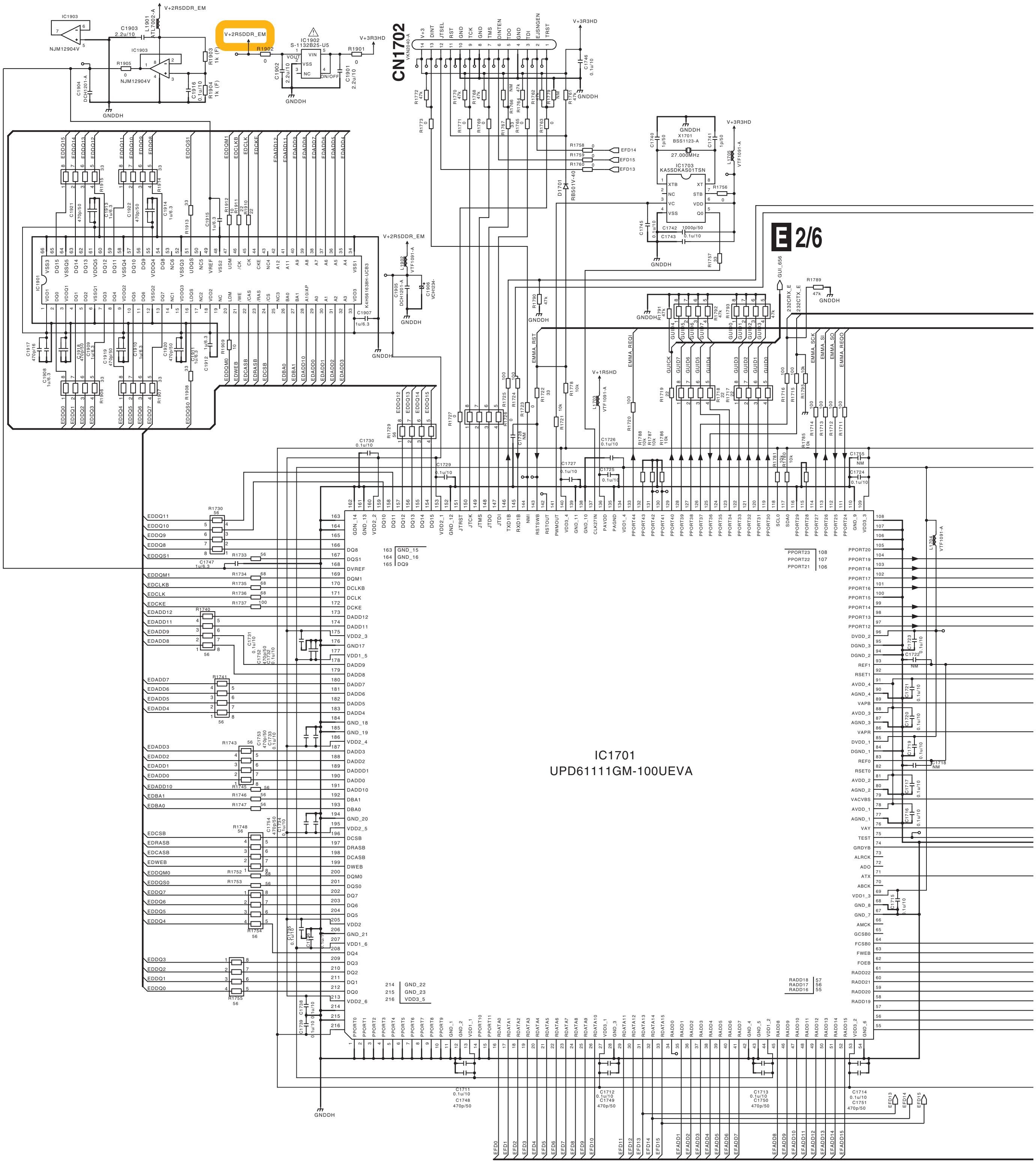
	awx9234	awx9235
C1301	150u	150u

	awx9234	awx9235
C301	10u	NM
C302	10u	NM
C303	10u	NM
C304	10u	NM
C305	10u	NM
C306	1u	NM
C307	0.1u	NM
C308	1u	NM
C309	0.1u	NM
C310	0.01u	NM
C311	1u	NM
C312	0.1u	NM
C313	1u	NM
C314	1u	NM
C315	1u	NM
C316	0.1u	NM
C317	0.1u	NM
C318	1u	NM
C319	1000p	NM
C320	1u	NM
C321	1u	NM
C322	0.1u	NM
C324	0.1u	NM
C325	0.4p	NM
C326	0.4p	NM
C327	0.4p	NM
C328	0.4p	NM
C329	0.4p	NM
C330	0.4p	NM
C331	0.4p	NM
C332	0.4p	NM
C333	470p	NM
C334	470p	NM
C335	470p	NM
C336	470p	NM
R301	15	NM
R302	47	NM
R303	10	NM
R304	470	NM
R305	680	NM
R306	18	NM
R307	10	NM
R308	10	NM
R309	10	NM
R310	10	NM
R312	10k	NM
R313	1k	NM
R314	4.7k	NM
R315	4.7k	NM
R316	4.7k	NM
R317	2.7k	NM
R318	2.7k	NM
R392	0	NM
R393	NM	0
R395	NM	0
L301	ATL7010-A	NM
L302	ATL7010-A	NM
L303	ATL7010-A	NM
L304	ATL7010-A	NM
L305	ATL7010-A	NM
L306	ATH7022-A	NM
L307	ATH7022-A	NM
L308	ATH7022-A	NM
L309	ATH7022-A	NM
IC301	SII9134CTU	NM
IC302	NJM2872BF05	NM
D301	UDZS5R1(B)	NM
JA301	AKP7225-A	NM
Q301	DTC114YUA	NM
Q302	UMB1N	NM

E 3/6 HDMI NETWORK ASSY
(SC-LX81 : AWX9234)
(SC-LX71 : AWX9235)

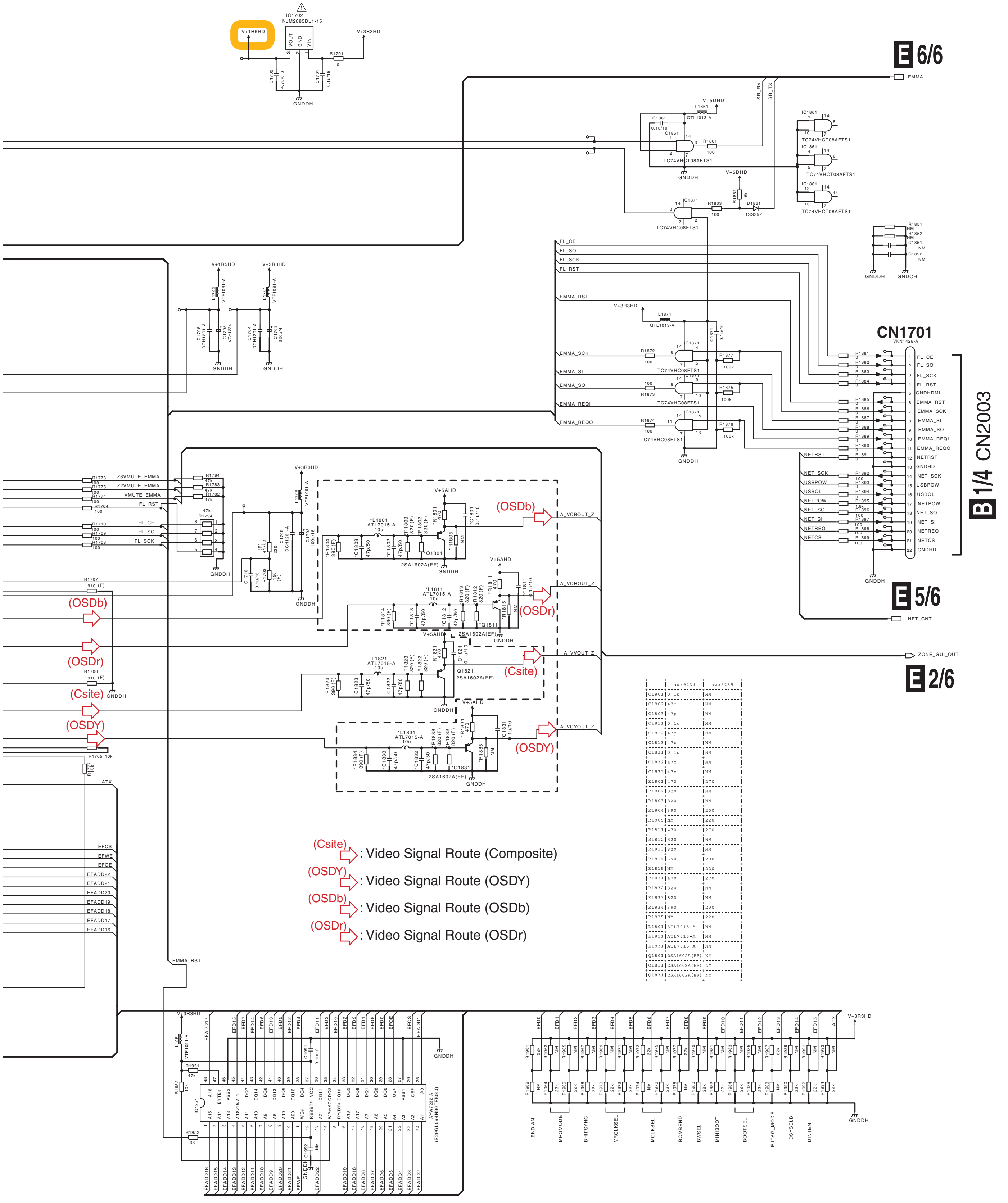

*IC301
HDMI Transmitter
IC351
HDMI Transmitter
*R313 1k
R363 1k
PUSEL1
PUSEL2
V+5DHD
*Q302 (1/2) UMB1N
*Q302 (2/2) UMB1N
Q352 (1/2) UMB1N
Q352 (2/2) UMB1N
*R315 4.7k
*R316 4.7k
*R317 2.7k
*R318 2.7k
R365 4.7k
R366 4.7k
R367 2.7k
R368 2.7k
*R308 10
*R307 10
R358 10
R357 10
*Q301 DTC114YUA
Q351 DTC114YUA
GNDDH
VA310 NM
VA309 NM
VA370 NM
VA359 NM
HDMI OUT1
HDMI OUT2
*JA301
JA351
*L306
*L307
*L308
*L309
L356
L357
L358
L359
ATH7022-A
1 Data2+
2 Data2 Shield
3 Data2-
4 Data1+
5 Data1 Shield
6 Data1-
7 Data0+
8 Data0 Shield
9 Data0-
10 Clock+
11 Clock Shield
12 Clock-
13 CEC
14 NC
15 SCL
16 SDA
17 DDC/CEC GND
18 +5V
19 Hot Plug Detect
AKP7225-A
L310 NM
L360 NM
L311
L361 NM
*C319 VCG1063-A 1000p/50
C369 VCG1063-A 1000p/50
R319 47k
R369 47k
*IC302
IC352
NJM2872BF05
Vout
Vin
GND
CONTROL
NOISE_BYPASS
V+6HD
*C320 1u/10 (1608)
C370 1u/10 (1608)
*C321 1u/10 (1608)
C371 1u/10 (1608)
C322 0.1u/16 (1608)
C372 0.1u/16 (1608)
C337 NM
C387 NM
*C325 VCG1066-A 0.4p
C375 VCG1066-A 0.4p
*R304 470
R354 470
TX1RST
TX2RST
*R302 47
R352 47
TXSPDIF
TXMCK
TXSD0
TXWS
TXSCK
HOTPLUG1
HOTPLUG2
RY391 NM
V+5RY
*R393 NM
*R392 0
CEC_IO
C391 NM
D391
R391 NM
*R395 NM
R394 NM
Q391 NM
CEC_SW
L:HDMI OUT 1
H:HDMI OUT 2
CEC
E 1/6, 2/6, 6/6
V+3R3HD
L252 QTL1013-A
C253 0.1u/10
R259 68
R258 NM
IC252 TC7SH08FUS1
RXSPDIF
R251 47
R257 0
R255 220
R252 68
R253 68
R256 0
R254 68
IC251 TC74VHC157FTS1
3Y 3B 3A 4Y 4B 4A XST VCC SELECT GND 2Y 2B 2A 1Y 1B 1A
L251 QTL1013-A
C251 0.1u/10
C252 1000p/50
RXMCK
RAMCK
RXSD0
BADAT
BALRCK
RXWS
BABCK
RXSCK
XBAOUT
AUDIO_RX
B_AUDIO
E 1/6
The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

10.11 HDMI NETWORK ASSY (4/6)


V+2R5DDR_EM
IC1903
NJM12904V
C1903
2.2u/10
L1901
VTL1202-A
R1905
R1903
1k (F)
R1904
1k (F)
C1916
0.1u/10
C1904
DCH1201-A
GNDDH
R1902
IC1902
S-1132B25-U5
VOUT
VIN
VSS
NC
ON/OFF
C1902
2.2u/10
C1901
2.2u/10
R1901
V+3R3HD
CN1702
VKN1260-A
V+3
DINT
JTSEL
RST
GND
TCK
TMS
DINTEN
TDO
TDI
EJSNGEN
TRST
C1746
0.1u/10
X1701
BSS1123-A
27.000MHz
IC1703
KA5SDKAS01TSN
XTB
XT
NC
STB
VC
VDD
VSS
Q0
R1758
R1759
R1760
EFD14
EFD15
EFD13
D1701
RB501V-40
L1705
VTF1091-A
IC1901
K4H561638H-UC83
V+2R5DDR_EM
L1902
VTF1091-A
C1905
DCH1201-A
C1906
VCH1234
E 2/6
GUI_656
232CRX_E
232CTX_E
R1789
47k
EMMA_REQ
EMMA_RST
EMMA_SCK
EMMA_SI
EMMA_SO
EMMA_REQO
V+1R5HD
L1703
VTF1091-A
IC1701
UPD61111GM-100UEVA
L1704
VTF1091-A
C1711
0.1u/10
C1748
470p/50
C1712
0.1u/10
C1749
470p/50
C1713
0.1u/10
C1750
470p/50
C1714
0.1u/10
C1751
470p/50
EFD13
EFD14
EFD15
GNDDH

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

E 4/6 HDMI NETWORK ASSY
(SC-LX81 : AWX9234)
(SC-LX71 : AWX9235)


IC1702 NJM2885DL1-15
V+1R5HD
V+3R3HD
VOUT GND VIN
R1701 0
C1702 4.7u/6.3
C1701 0.1u/16
GNDDH
E 6/6
EMMA
SR_RX
SR_TX
V+5DHD
L1861 QTL1013-A
C1861 0.1u/10
IC1861
TC74VHCT08AFTS1
R1861 100
R1862 1.8k
D1861 1SS352
IC1871
TC74VHC08FTS1
R1863 100
R1851 NM
R1852 NM
C1851 NM
C1852 NM
GNDCH
FL_CE
FL_SO
FL_SCK
FL_RST
EMMA_RST
L1871 QTL1013-A
C1871 0.1u/10
EMMA_SCK
EMMA_SI
EMMA_SO
EMMA_REQI
EMMA_REQO
R1872 100
R1873 100
R1874 100
R1877 100k
R1875 100k
R1876 100k
CN1701
VKN1426-A
1 FL_CE
2 FL_SO
3 FL_SCK
4 FL_RST
5 GNDHDMI
6 EMMA_RST
7 EMMA_SCK
8 EMMA_SI
9 EMMA_SO
10 EMMA_REQI
11 EMMA_REQO
12 NETRST
13 GNDHD
14 NET_SCK
15 USBPOW
16 USBOL
17 NETPOW
18 NET_SO
19 NET_SI
20 NETREQ
21 NETCS
22 GNDHD
B 1/4 CN2003
NETRST
NET_SCK
USBPOW
USBOL
NETPOW
NET_SO
NET_SI
NETREQ
NETCS
E 5/6
NET_CNT
V+1R5HD
V+3R3HD
L1702 VTF1091-A
L1701 VTF1091-A
C1706 DCH1201-A
C1705 VCH1234-
C1704 DCH1201-A
C1703 220u/4
Z3VMUTE_EMMA
Z2VMUTE_EMMA
VMUTE_EMMA
FL_RST
FL_CE
FL_SO
FL_SCK
R1776 100
R1775 100
R1774 100
R1704 100
R1710 100
R1709 100
R1708 100
R1784 47k
R1783 47k
R1782 47k
R1794 47k
R1707 910 (F)
R1706 910 (F)
R1705 10k
R1727 10k
ATX
L1706 VTF1091-A
C1709 DCH1201-A
C1708 100u/16
C1722 220
R1703 150 (F)
C1710 0.1u/16
(OSDb)
(OSDr)
(Csite)
(OSDY)
A_VCBOUT_Z
A_VCROUT_Z
A_VVOUT_Z
A_VCYOUT_Z
ZONE_GUI_OUT
E 2/6
V+5AHD
*L1801 ATL7015-A 10u
*R1804 390 (F)
*C1803 47p/50
*C1802 47p/50
*R1803 820 (F)
*R1802 820 (F)
*R1801 470
*C1801 0.1u/10
*R1805 NM
*Q1801 2SA1602A(EF)
*L1811 ATL7015-A 10u
*R1814 390 (F)
*C1813 47p/50
*C1812 47p/50
*R1813 820 (F)
*R1812 820 (F)
*R1811 470
*C1811 0.1u/10
*R1815 NM
*Q1811 2SA1602A(EF)
L1821 ATL7015-A 10u
R1824 390 (F)
C1823 47p/50
C1822 47p/50
R1823 820 (F)
R1822 820 (F)
R1821 470
C1821 0.1u/10
Q1821 2SA1602A(EF)
*L1831 ATL7015-A 10u
*R1834 390 (F)
*C1833 47p/50
*C1832 47p/50
*R1833 820 (F)
*R1832 820 (F)
*R1831 470
*C1831 0.1u/10
*R1835 NM
*Q1831 2SA1602A(EF)
EFCS
EFWE
EFOE
EFADD22
EFADD21
EFADD20
EFADD19
EFADD18
EFADD17
EFADD16
EMMA_RST
L1951 VTF1091-A
R1951 47k
R1952 10k
R1953 33
IC1951
AYW7232-A
(S29GL064N90TFI030)
C1951 0.1u/10
C1952 NM
EFD0 – EFD15
EFADD1 – EFADD22
ENDIAN
MRGMODE
BHIFSYNC
VRCLKSEL
MCLKSEL
ROMBEND
BWSEL
MINIBOOT
BOOTSEL
EJTAG_MODE
DSYSELB
DINTEN
R1961 – R1994 22k / NM

	awx9234	awx9235
C1801	0.1u	NM
C1802	47p	NM
C1803	47p	NM
C1811	0.1u	NM
C1812	47p	NM
C1813	47p	NM
C1831	0.1u	NM
C1832	47p	NM
C1833	47p	NM
R1801	470	270
R1802	820	NM
R1803	820	NM
R1804	390	200
R1805	NM	220
R1811	470	270
R1812	820	NM
R1813	820	NM
R1814	390	200
R1815	NM	220
R1831	470	270
R1832	820	NM
R1833	820	NM
R1834	390	200
R1835	NM	220
L1801	ATL7015-A	NM
L1811	ATL7015-A	NM
L1831	ATL7015-A	NM
Q1801	2SA1602A(EF)	NM
Q1811	2SA1602A(EF)	NM
Q1831	2SA1602A(EF)	NM

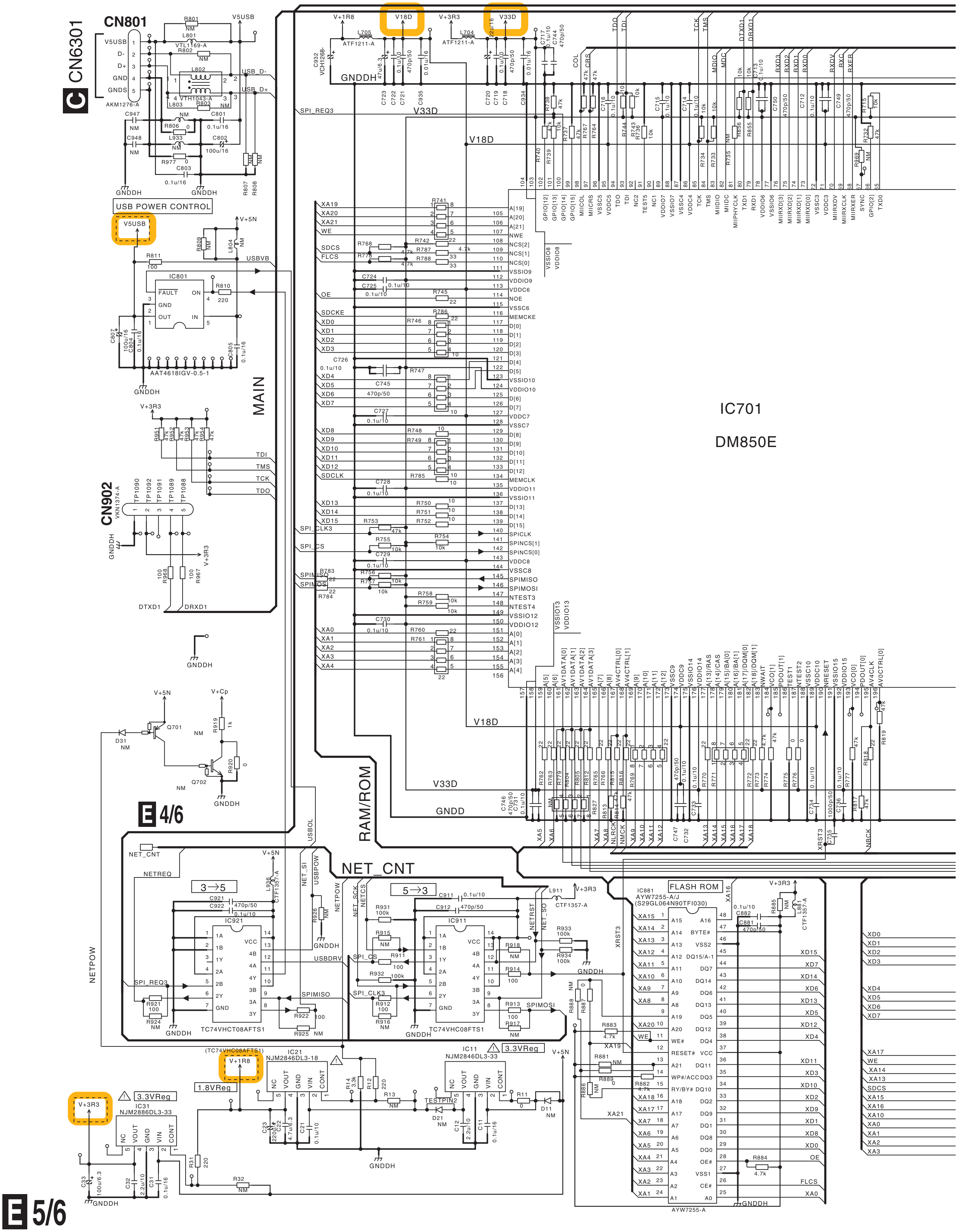
(Csite) ⇨ : Video Signal Route (Composite)

(OSDY) ⇨ : Video Signal Route (OSDY)

(OSDb) ⇨ : Video Signal Route (OSDb)

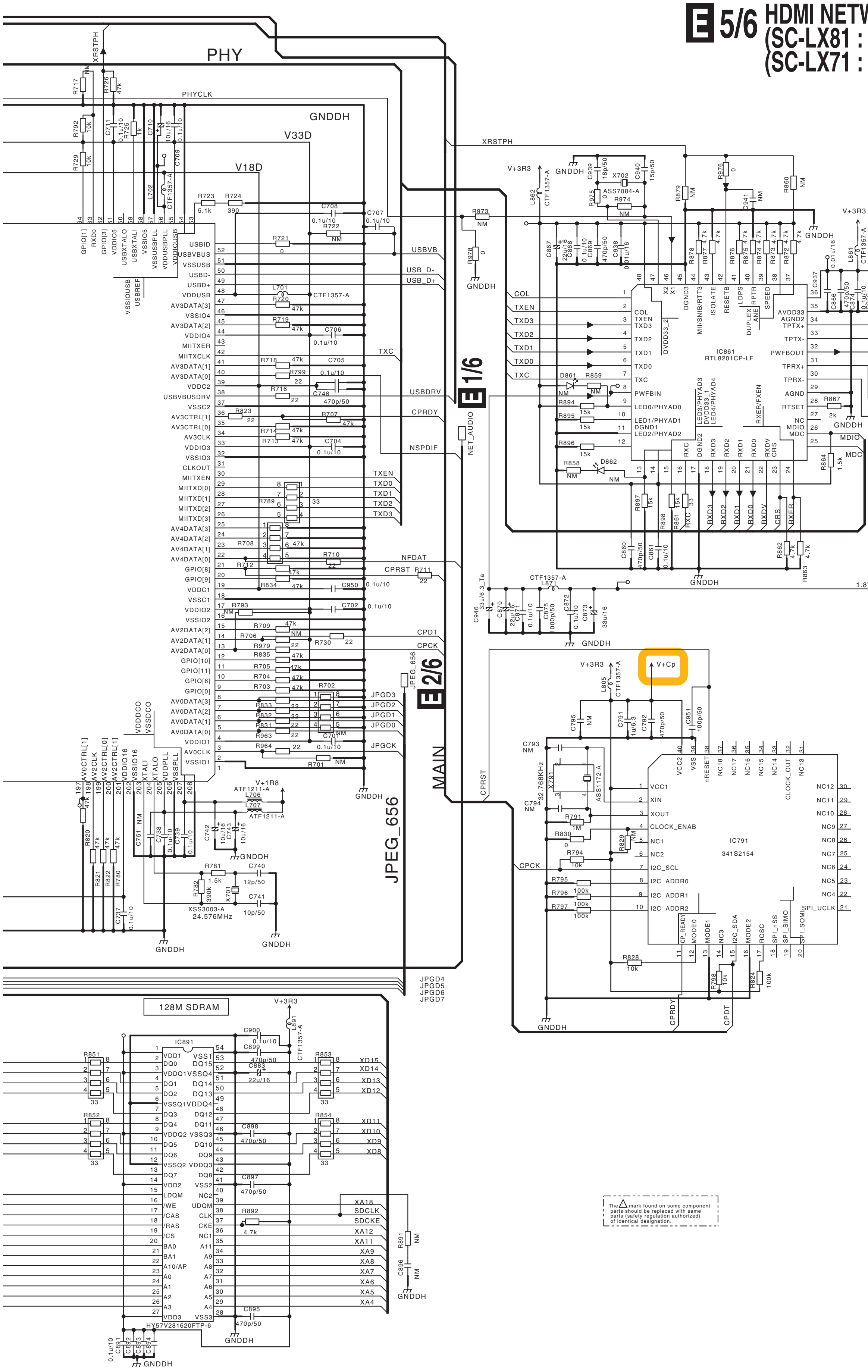
(OSDr) ⇨ : Video Signal Route (OSDr)

10.12 HDMI NETWORK ASSY (5/6)



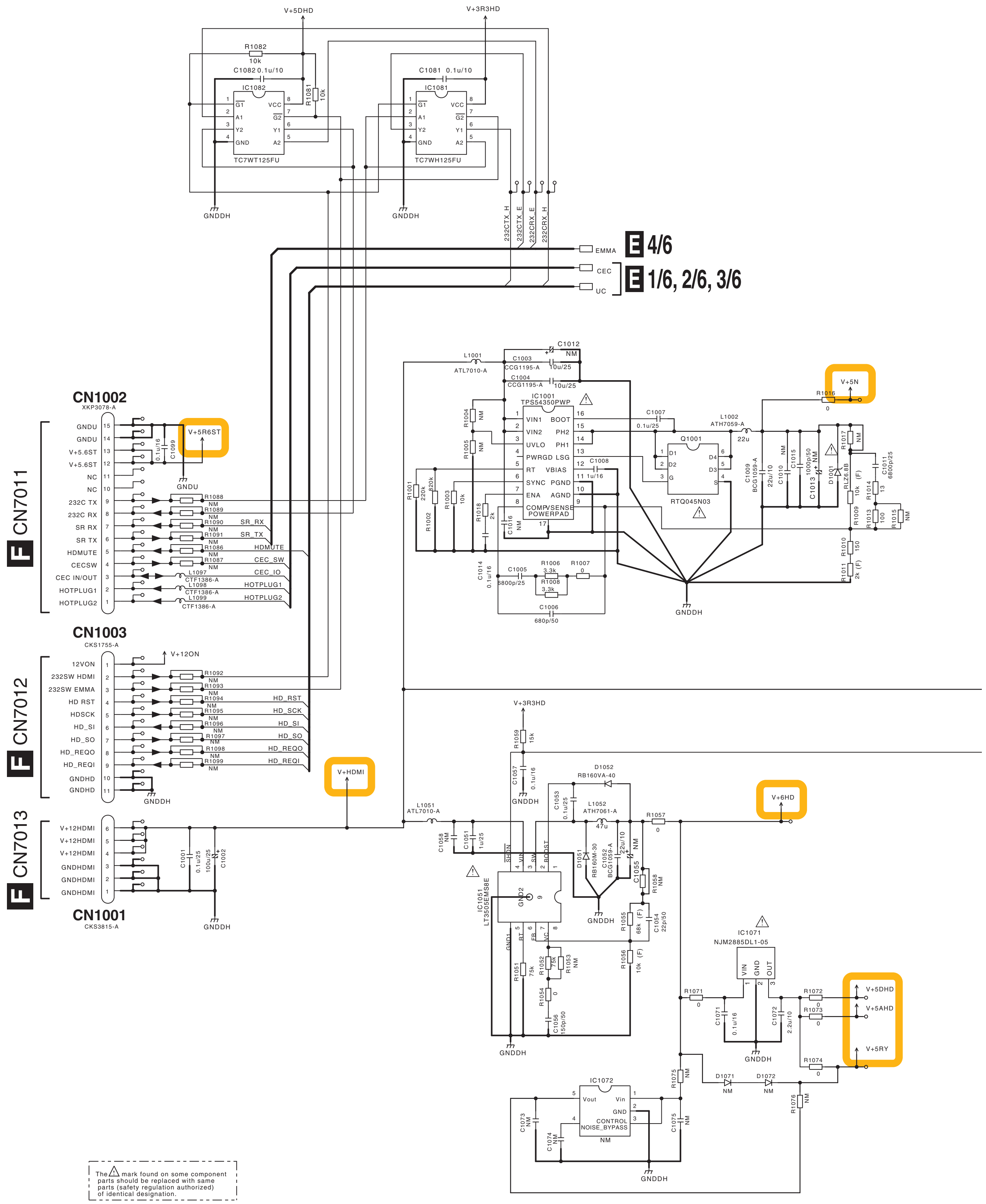
C CN6301
CN801
AKM1276-A
V5USB
D-
D+
GND
GNDS
USB_D-
USB_D+
USB POWER CONTROL
IC801
AAT4618IGV-0.5-1
FAULT
ON
GND
OUT
IN
USBVB
V+5N
V+3R3
TDI
TMS
TCK
TDO
CN902
VKN1374-A
TP1090
TP1092
TP1091
TP1089
TP1088
DTXD1
DRXD1
GNDDH
MAIN
SPI_REQ3
V+1R8
V18D
V33D
GNDDH
ATF1211-A
L705
L704
IC701
DM850E
RAM/ROM
V18D
V33D
GNDD
Q701
Q702
D31
V+Cp
E 4/6
NET_CNT
NETREQ
NETPOW
USBOL
USBPOW
USBDRV
NET_SI
NET_SCK
NETCS
NETRST
NET_SO
SPI_CS
SPI_CLK3
SPIMISO
SPIMOSI
3→5
5→3
IC921
TC74VHCT08AFTS1
IC911
TC74VHC08FTS1
IC881
AYW7255-A/J
(S29GL064N90TFI030)
FLASH ROM
XRST3
IC21
NJM2846DL3-18
1.8VReg
IC11
NJM2846DL3-33
3.3VReg
IC31
NJM2886DL3-33
3.3VReg
TESTPIN2
D11
D21
E 5/6

E 5/6 HDMI NETWORK ASSY (SC-LX81 : AWX9234) (SC-LX71 : AWX9235)


PHY
PHYCLK
GNDDH
V33D
V18D
XRSTPH
USBID
USBVBUS
USB_D-
USB_D+
USBDRV
CPRDY
NSPDIF
TXC
TXEN
TXD0
TXD1
TXD2
TXD3
NFDAT
CPRST
CPDT
CPCK
JPGD0
JPGD1
JPGD2
JPGD3
JPGCK
JPEG_656
E 1/6
E 2/6
MAIN
NET_AUDIO
IC861
RTL8201CP-LF
COL
RXC
RXD0
RXD1
RXD2
RXD3
RXDV
CRS
RXER
MDIO
MDC
JA701
VKN2078-A
TD+
TD-
RD+
TCT
RCT
RD-
N.C.
GNDC
L863
VTH1056-A
L864
VTH1056-A
X702
ASS7084-A
V+3R3
V+Cp
1.8V
IC791
341S2154
X791
32.768KHz
ASS1172-A
X701
XSS3003-A
24.576MHz
V+1R8
ATF1211-A
CTF1357-A
128M SDRAM
IC891
HY57V281620FTP-6
XD8
XD9
XD10
XD11
XD12
XD13
XD14
XD15
XA4
XA5
XA6
XA7
XA8
XA9
XA11
XA12
XA18
SDCLK
SDCKE
JPGD4
JPGD5
JPGD6
JPGD7

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

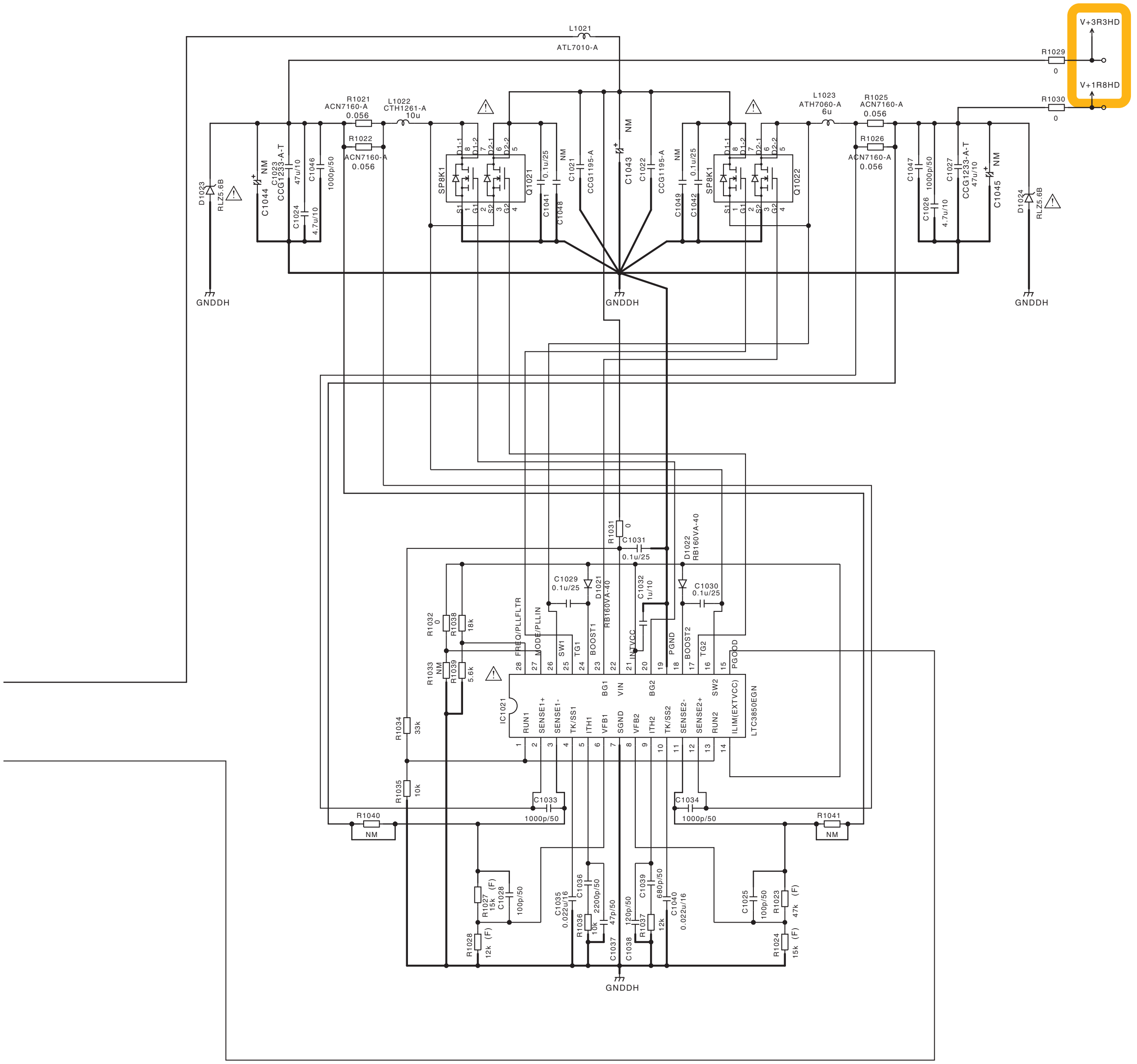
10.13 HDMI NETWORK ASSY (6/6)


V+5DHD
V+3R3HD
R1082
10k
C1082 0.1u/10
IC1082
G1
VCC
A1
G2
Y2
Y1
GND
A2
TC7WT125FU
R1081
10k
C1081 0.1u/10
IC1081
TC7WH125FU
GNDDH
232CTX_H
232CTX_E
232CRX_E
232CRX_H
EMMA
CEC
UC
E 4/6
E 1/6, 2/6, 3/6
L1001
ATL7010-A
C1012
NM
C1003
CCG1195-A
10u/25
C1004
CCG1195-A
10u/25
IC1001
TPS54350PWP
VIN1
BOOT
VIN2
PH2
UVLO
PH1
PWRGD
LSG
RT
VBIAS
SYNC
PGND
ENA
AGND
COMP/SENSE
POWERPAD
C1007
0.1u/25
L1002
ATH7059-A
22u
Q1001
D1
D2
D3
D4
G
S
RTQ045N03
C1008
1u/16
R1004
NM
R1005
NM
R1001
220k
820k
R1002
R1003
10k
R1018
2k
C1016
NM
C1014
0.1u/16
C1005
6800p/25
R1006
3.3k
R1007
0
R1008
3.3k
C1006
680p/50
GNDDH
V+5N
R1016
0
C1009
BCG1059-A
22u/10
C1010
NM
C1015
1000p/50
C1013
NM
D1001
RLZ6.8B
R1017
NM
C1011
6800p/25
R1014
10k (F)
13
R1009
R1013
100
R1015
NM
R1010
150
R1011
2k (F)
CN1002
XKP3078-A
GNDU
GNDU
V+5.6ST
V+5.6ST
NC
NC
232C TX
232C RX
SR RX
SR TX
HDMUTE
CECSW
CEC IN/OUT
HOTPLUG1
HOTPLUG2
0.1u/16
C1099
V+5R6ST
GNDU
R1088
NM
R1089
NM
R1090
NM
R1091
NM
R1086
NM
R1087
NM
L1097
CTF1386-A
L1098
CTF1386-A
L1099
CTF1386-A
SR_RX
SR_TX
HDMUTE
CEC_SW
CEC_IO
HOTPLUG1
HOTPLUG2
F CN7011
CN1003
CKS1755-A
12VON
232SW HDMI
232SW EMMA
HD RST
HDSCK
HD_SI
HD_SO
HD_REQO
HD_REQI
GNDHD
GNDHD
V+12ON
R1092
NM
R1093
NM
R1094
NM
R1095
NM
R1096
NM
R1097
NM
R1098
NM
R1099
NM
HD_RST
HD_SCK
HD_SI
HD_SO
HD_REQO
HD_REQI
GNDDH
F CN7012
V+HDMI
V+12HDMI
V+12HDMI
V+12HDMI
GNDHDMI
GNDHDMI
GNDHDMI
C1001
0.1u/25
100u/25
C1002
CN1001
CKS3815-A
GNDDH
F CN7013
V+3R3HD
R1059
15k
C1057
0.1u/16
GNDDH
D1052
RB160VA-40
C1053
0.1u/25
L1052
ATH7061-A
47u
L1051
ATL7010-A
C1058
NM
C1051
1u/25
SHDN
VIN
SW
BOOST
GND2
GND1
RT
FB
VC
IC1051
LT3505EMS8E
D1051
RB160M-30
C1052
BCG1059-A
22u/10
NM
C1055
R1058
NM
R1057
0
V+6HD
GNDDH
R1055
68k (F)
C1054
22p/50
R1056
10k (F)
R1051
75k
R1052
75k
R1053
NM
R1054
0
C1056
150p/50
GNDDH
IC1071
NJM2885DL1-05
VIN
GND
OUT
R1071
0
C1071
0.1u/16
C1072
2.2u/10
GNDDH
R1072
0
V+5DHD
R1073
0
V+5AHD
R1074
0
V+5RY
R1075
NM
D1071
NM
D1072
NM
R1076
NM
IC1072
Vout
Vin
GND
CONTROL
NOISE_BYPASS
NM
C1073
NM
C1074
NM
C1075
NM
GNDDH

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

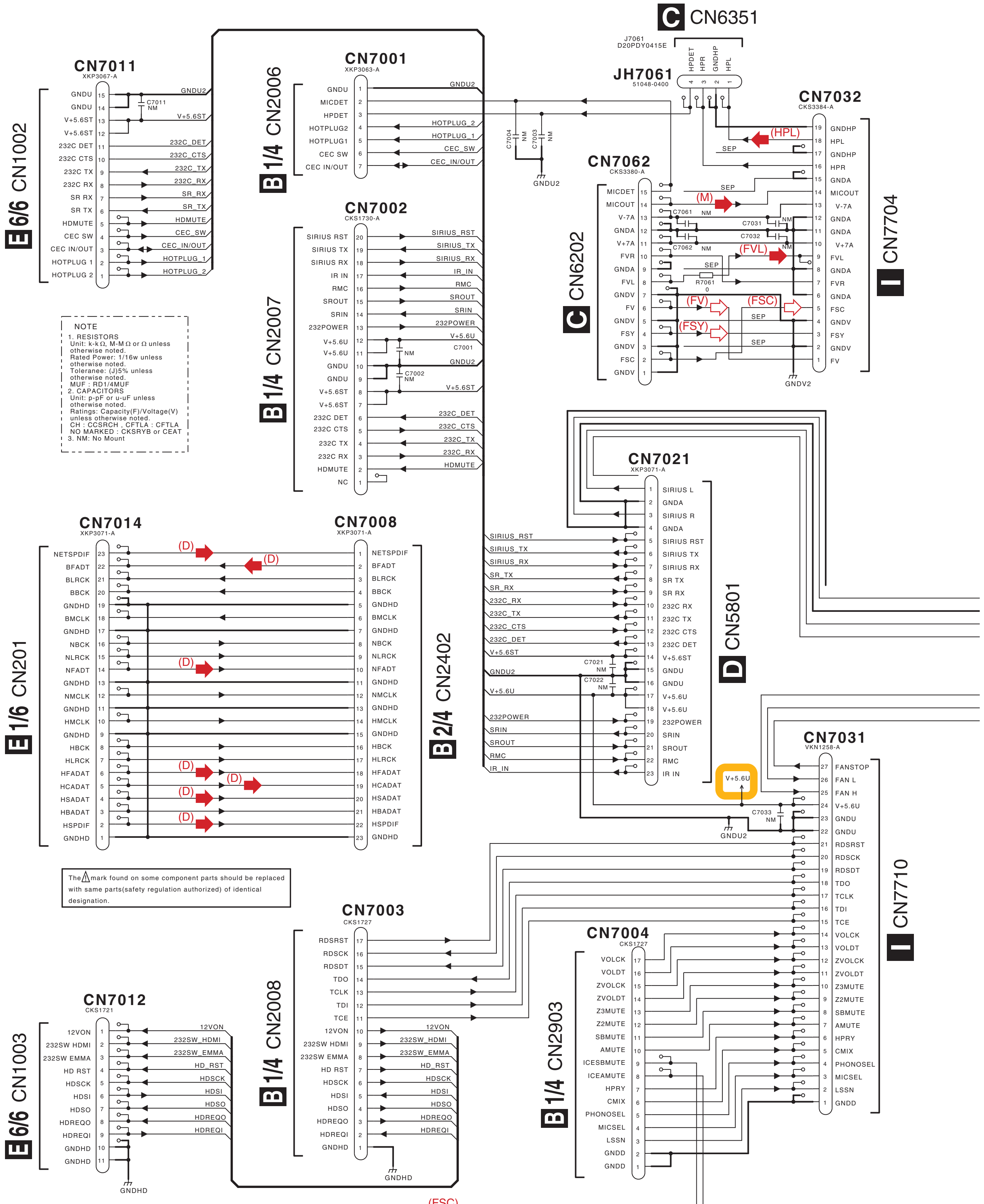
E 6/6

E 6/6 HDMI NETWORK ASSY (SC-LX81 : AWX9234) (SC-LX71 : AWX9235)



V+3R3HD
V+1R8HD
R1029
0
R1030
0
L1021
ATL7010-A
R1021
ACN7160-A
0.056
L1022
CTH1261-A
10u
R1022
ACN7160-A
0.056
L1023
ATH7060-A
6u
R1025
ACN7160-A
0.056
R1026
ACN7160-A
0.056
D1023
RLZ5.6B
C1044
NM
C1023
CCG1233-A-T
47u/10
C1046
1000p/50
C1024
4.7u/10
SP8K1
D1-1
D1-2
D2-1
D2-2
S1
G1
S2
G2
Q1021
C1041
0.1u/25
C1048
NM
C1021
CCG1195-A
C1043
NM
C1022
CCG1195-A
C1049
NM
C1042
0.1u/25
Q1022
C1047
1000p/50
C1026
4.7u/10
C1027
CCG1233-A-T
47u/10
C1045
NM
D1024
RLZ5.6B
GNDDH
GNDDH
GNDDH
R1031
0
C1031
0.1u/25
D1022
RB160VA-40
C1029
0.1u/25
D1021
RB160VA-40
C1032
1u/10
C1030
0.1u/25
R1032
0
R1038
18k
R1033
NM
R1039
5.6k
R1034
33k
R1035
10k
IC1021
LTC3850EGN
28 FREQ/PLLFLTR
27 MODE/PLLIN
26 SW1
25 TG1
24 BOOST1
23 BG1
22 VIN
21 INTVCC
20 BG2
19 PGND
18 BOOST2
17 TG2
16 SW2
15 PGOOD
1 RUN1
2 SENSE1+
3 SENSE1-
4 TK/SS1
5 ITH1
6 VFB1
7 SGND
8 VFB2
9 ITH2
10 TK/SS2
11 SENSE2-
12 SENSE2+
13 RUN2
14 ILIM(EXTVCC)
C1033
1000p/50
C1034
1000p/50
R1040
NM
R1041
NM
R1027
15k (F)
C1028
100p/50
R1028
12k (F)
C1035
0.022u/16
C1036
2200p/50
R1036
10k
C1037
47p/50
C1038
120p/50
R1037
12k
C1039
680p/50
C1040
0.022u/16
C1025
100p/50
R1023
47k (F)
R1024
15k (F)
GNDDH

10.14 INTERFACE ASSY


A
B
C
D
E
F
C CN6351
J7061
D20PDY0415E
HPDET
HPR
GNDHP
HPL
JH7061
51048-0400
4 3 2 1
CN7011
XKP3067-A
E 6/6 CN1002
GNDU 15
GNDU 14
V+5.6ST 13
V+5.6ST 12
232C DET 11
232C CTS 10
232C TX 9
232C RX 8
SR RX 7
SR TX 6
HDMUTE 5
CEC SW 4
CEC IN/OUT 3
HOTPLUG 1 2
HOTPLUG 2 1
GNDU2
C7011
NM
V+5.6ST
232C_DET
232C_CTS
232C_TX
232C_RX
SR_RX
SR_TX
HDMUTE
CEC_SW
CEC_IN/OUT
HOTPLUG_1
HOTPLUG_2
CN7001
XKP3063-A
B 1/4 CN2006
GNDU 1
MICDET 2
HPDET 3
HOTPLUG2 4
HOTPLUG1 5
CEC SW 6
CEC IN/OUT 7
GNDU2
HOTPLUG_2
HOTPLUG_1
CEC_SW
CEC_IN/OUT
C7004
NM
C7003
NM
GNDU2
CN7002
CKS1730-A
B 1/4 CN2007
SIRIUS RST 20
SIRIUS TX 19
SIRIUS RX 18
IR IN 17
RMC 16
SROUT 15
SRIN 14
232POWER 13
V+5.6U 12
V+5.6U 11
GNDU 10
GNDU 9
V+5.6ST 8
V+5.6ST 7
232C DET 6
232C CTS 5
232C TX 4
232C RX 3
HDMUTE 2
NC 1
SIRIUS_RST
SIRIUS_TX
SIRIUS_RX
IR_IN
RMC
SROUT
SRIN
232POWER
V+5.6U
C7001
NM
GNDU2
C7002
NM
V+5.6ST
232C_DET
232C_CTS
232C_TX
232C_RX
HDMUTE
CN7062
CKS3380-A
C CN6202
MICDET 15
MICOUT 14
V-7A 13
GNDA 12
V+7A 11
FVR 10
GNDA 9
FVL 8
GNDV 7
FV 6
GNDV 5
FSY 4
GNDV 3
FSC 2
GNDV 1
C7061
NM
C7062
NM
C7031
C7032
NM
NM
R7061
0
SEP
SEP
SEP
SEP
SEP
(M)
(FVL)
(FV)
(FSC)
(FSY)
(HPL)
GNDV2
CN7032
CKS3384-A
I CN7704
19 GNDHP
18 HPL
17 GNDHP
16 HPR
15 GNDA
14 MICOUT
13 V-7A
12 GNDA
11 GNDA
10 V+7A
9 FVL
8 GNDA
7 FVR
6 GNDA
5 FSC
4 GNDV
3 FSY
2 GNDV
1 FV
CN7021
XKP3071-A
D CN5801
1 SIRIUS L
2 GNDA
3 SIRIUS R
4 GNDA
5 SIRIUS RST
6 SIRIUS TX
7 SIRIUS RX
8 SR TX
9 SR RX
10 232C RX
11 232C TX
12 232C CTS
13 232C DET
14 V+5.6ST
15 GNDU
16 GNDU
17 V+5.6U
18 V+5.6U
19 232POWER
20 SRIN
21 SROUT
22 RMC
23 IR IN
SIRIUS_RST
SIRIUS_TX
SIRIUS_RX
SR_TX
SR_RX
232C_RX
232C_TX
232C_CTS
232C_DET
V+5.6ST
GNDU2
V+5.6U
232POWER
SRIN
SROUT
RMC
IR_IN
C7021
NM
C7022
NM
V+5.6U
C7033
NM
GNDU2
CN7031
VKN1258-A
I CN7710
27 FANSTOP
26 FAN L
25 FAN H
24 V+5.6U
23 GNDU
22 GNDU
21 RDSRST
20 RDSCK
19 RDSDT
18 TDO
17 TCLK
16 TDI
15 TCE
14 VOLCK
13 VOLDT
12 ZVOLCK
11 ZVOLDT
10 Z3MUTE
9 Z2MUTE
8 SBMUTE
7 AMUTE
6 HPRY
5 CMIX
4 PHONOSEL
3 MICSEL
2 LSSN
1 GNDD
CN7014
XKP3071-A
E 1/6 CN201
NETSPDIF 23
BFADT 22
BLRCK 21
BBCK 20
GNDHD 19
BMCLK 18
GNDHD 17
NBCK 16
NLRCK 15
NFADT 14
GNDHD 13
NMCLK 12
GNDHD 11
HMCLK 10
GNDHD 9
HBCK 8
HLRCK 7
HFADAT 6
HCADAT 5
HSADAT 4
HBADAT 3
HSPDIF 2
GNDHD 1
(D)
(D)
(D)
(D)
(D)
(D)
(D)
(D)
CN7008
XKP3071-A
B 2/4 CN2402
1 NETSPDIF
2 BFADT
3 BLRCK
4 BBCK
5 GNDHD
6 BMCLK
7 GNDHD
8 NBCK
9 NLRCK
10 NFADT
11 GNDHD
12 NMCLK
13 GNDHD
14 HMCLK
15 GNDHD
16 HBCK
17 HLRCK
18 HFADAT
19 HCADAT
20 HSADAT
21 HBADAT
22 HSPDIF
23 GNDHD
CN7003
CKS1727
B 1/4 CN2008
RDSRST 17
RDSCK 16
RDSDT 15
TDO 14
TCLK 13
TDI 12
TCE 11
12VON 10
232SW HDMI 9
232SW EMMA 8
HD RST 7
HDSCK 6
HDSI 5
HDSO 4
HDREQO 3
HDREQI 2
GNDHD 1
12VON
232SW_HDMI
232SW_EMMA
HD_RST
HDSCK
HDSI
HDSO
HDREQO
HDREQI
GNDHD
CN7004
CKS1727
B 1/4 CN2903
VOLCK 17
VOLDT 16
ZVOLCK 15
ZVOLDT 14
Z3MUTE 13
Z2MUTE 12
SBMUTE 11
AMUTE 10
ICESBMUTE 9
ICEAMUTE 8
HPRY 7
CMIX 6
PHONOSEL 5
MICSEL 4
LSSN 3
GNDD 2
GNDD 1
CN7012
CKS1721
E 6/6 CN1003
12VON 1
232SW HDMI 2
232SW EMMA 3
HD RST 4
HDSCK 5
HDSI 6
HDSO 7
HDREQO 8
HDREQI 9
GNDHD 10
GNDHD 11
12VON
232SW_HDMI
232SW_EMMA
HD_RST
HDSCK
HDSI
HDSO
HDREQO
HDREQI
GNDHD

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
MUF : RD1/4MUF
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH , CFTLA : CFTLA
NO MARKED : CKSRYB or CEAT
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

(FSC) ⇨ : S-Video Signal Route (Front C)

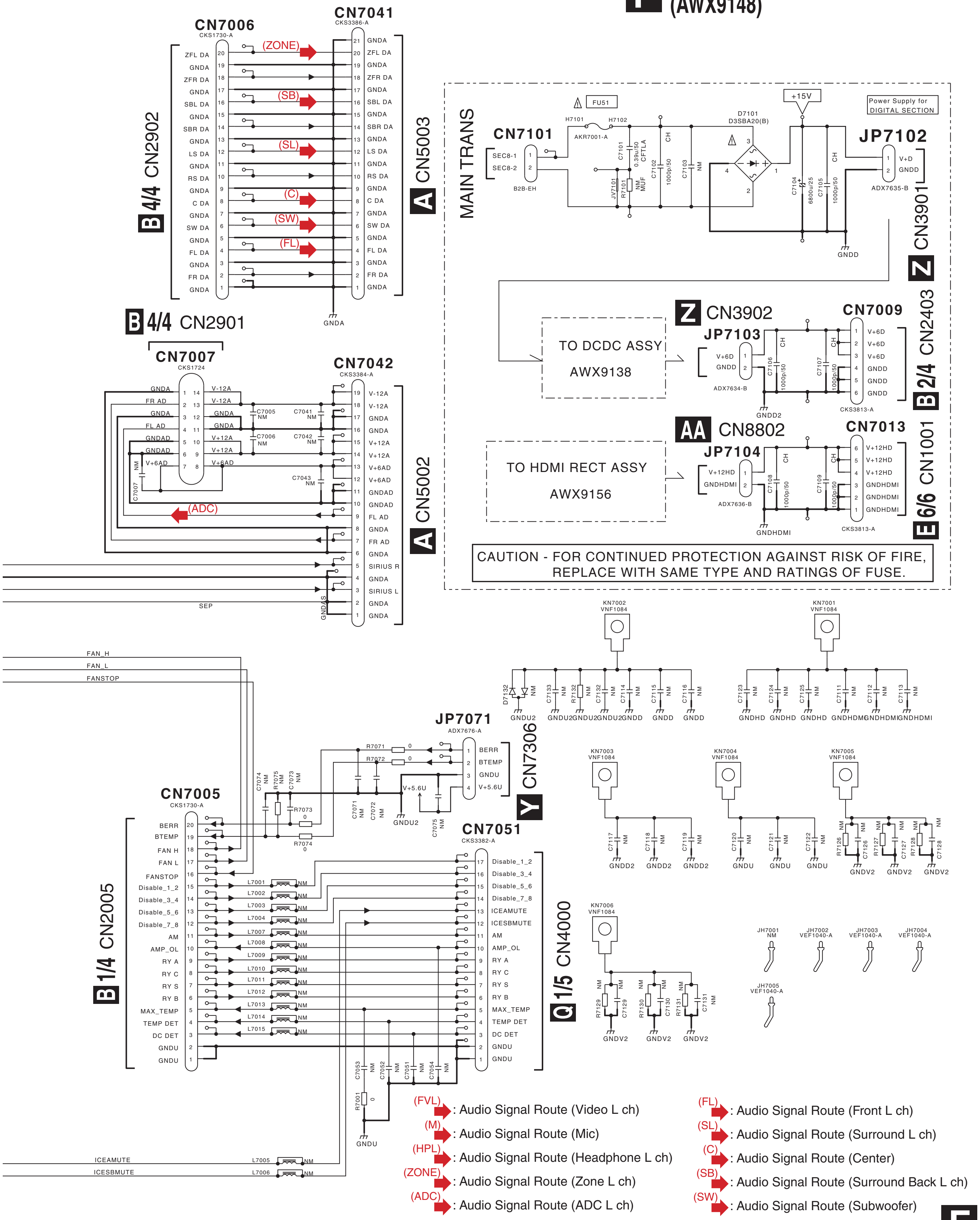
(FSY) ⇨ : S-Video Signal Route (Front Y)

(FV) ⇨ : Video Signal Route (Video)

(D) ➡ : Audio Data Route

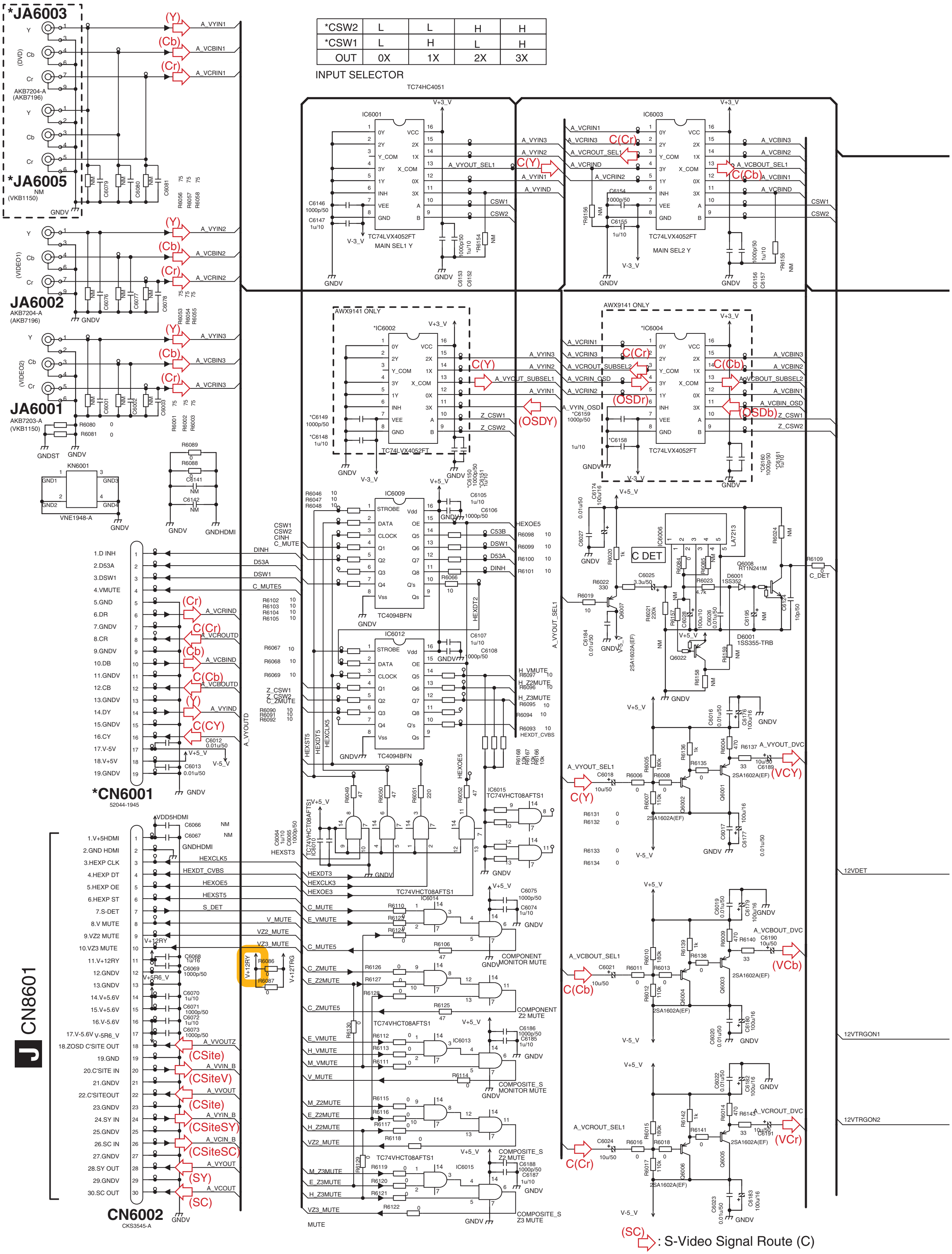
F

F INTERFACE ASSY (AWX9148)


CN7006 CKS1730-A
CN7041 CKS3386-A
B 4/4 CN2902
A CN5003
(ZONE)
(SB)
(SL)
(C)
(SW)
(FL)
ZFL DA
ZFR DA
SBL DA
SBR DA
LS DA
RS DA
C DA
SW DA
FL DA
FR DA
GNDA
B 4/4 CN2901
CN7007 CKS1724
CN7042 CKS3384-A
A CN5002
V-12A
V+12A
V+6AD
GNDAD
FL AD
FR AD
SIRIUS R
SIRIUS L
(ADC)
SEP
MAIN TRANS
CN7101
SEC8-1
SEC8-2
B2B-EH
FU51
H7101
H7102
AKR7001-A
D7101 D3SBA20(B)
+15V
Power Supply for DIGITAL SECTION
JP7102
V+D
GNDD
ADX7635-B
Z CN3901
Z CN3902
JP7103
TO DCDC ASSY AWX9138
CN7009
B 2/4 CN2403
AA CN8802
JP7104
TO HDMI RECT ASSY AWX9156
CN7013
E 6/6 CN1001
V+12HD
GNDHDMI
KN7001 VNF1084
KN7002 VNF1084
KN7003 VNF1084
KN7004 VNF1084
KN7005 VNF1084
KN7006 VNF1084
JP7071 ADX7676-A
BERR
BTEMP
GNDU
V+5.6U
Y CN7306
CN7005 CKS1730-A
CN7051 CKS3382-A
B 1/4 CN2005
Q 1/5 CN4000
FAN_H
FAN_L
FANSTOP
Disable_1_2
Disable_3_4
Disable_5_6
Disable_7_8
ICEAMUTE
ICESBMUTE
AM
AMP_OL
RY A
RY C
RY S
RY B
MAX_TEMP
TEMP DET
DC DET
JH7001
JH7002 VEF1040-A
JH7003 VEF1040-A
JH7004 VEF1040-A
JH7005 VEF1040-A
(FVL) : Audio Signal Route (Video L ch)
(M) : Audio Signal Route (Mic)
(HPL) : Audio Signal Route (Headphone L ch)
(ZONE) : Audio Signal Route (Zone L ch)
(ADC) : Audio Signal Route (ADC L ch)
(FL) : Audio Signal Route (Front L ch)
(SL) : Audio Signal Route (Surround L ch)
(C) : Audio Signal Route (Center)
(SB) : Audio Signal Route (Surround Back L ch)
(SW) : Audio Signal Route (Subwoofer)

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

10.15 COMPONENT ASSY



*JA6003
(DVD)
AKB7204-A
(AKB7196)
*JA6005
NM
(VKB1150)
JA6002
(VIDEO1)
AKB7204-A
(AKB7196)
JA6001
(VIDEO2)
AKB7203-A
(VKB1150)
KN6001
VNE1948-A
TC74HC4051
IC6001
TC74LVX4052FT
MAIN SEL1 Y
IC6003
TC74LVX4052FT
MAIN SEL2 Y
AWX9141 ONLY
*IC6002
*IC6004
IC6009
TC4094BFN
IC6012
TC4094BFN
IC6015
TC74VHCT08AFTS1
IC6014
IC6013
LA7213
C DET
COMPONENT MONITOR MUTE
COMPONENT Z2 MUTE
COMPOSITE_S MONITOR MUTE
COMPOSITE_S Z2 MUTE
COMPOSITE_S Z3 MUTE
*CN6001
52044-1945
CN6002
CKS3545-A
CN8601
J
1.D INH
2.D53A
3.DSW1
4.VMUTE
5.GND
6.DR
7.GNDV
8.CR
9.GNDV
10.DB
11.GNDV
12.CB
13.GNDV
14.DY
15.GNDV
16.CY
17.V-5V
18.V+5V
19.GNDV
1.V+5HDMI
2.GND HDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.V MUTE
9.VZ2 MUTE
10.VZ3 MUTE
11.V+12RY
12.GNDV
13.GNDV
14.V+5.6V
15.V+5.6V
16.V-5.6V
17.V-5.6V
18.ZOSD C'SITE OUT
19.GND
20.C'SITE IN
21.GNDV
22.C'SITEOUT
23.GNDV
24.SY IN
25.GNDV
26.SC IN
27.GNDV
28.SY OUT
29.GNDV
30.SC OUT
(Y)
(Cb)
(Cr)
C(Y)
C(Cb)
C(Cr)
(OSDY)
(OSDr)
(OSDb)
(VCY)
(VCb)
(VCr)
(CSite)
(CSiteV)
(CSiteSY)
(CSiteSC)
(SY)
(SC)
12VDET
12VTRGON1
12VTRGON2

INPUT SELECTOR

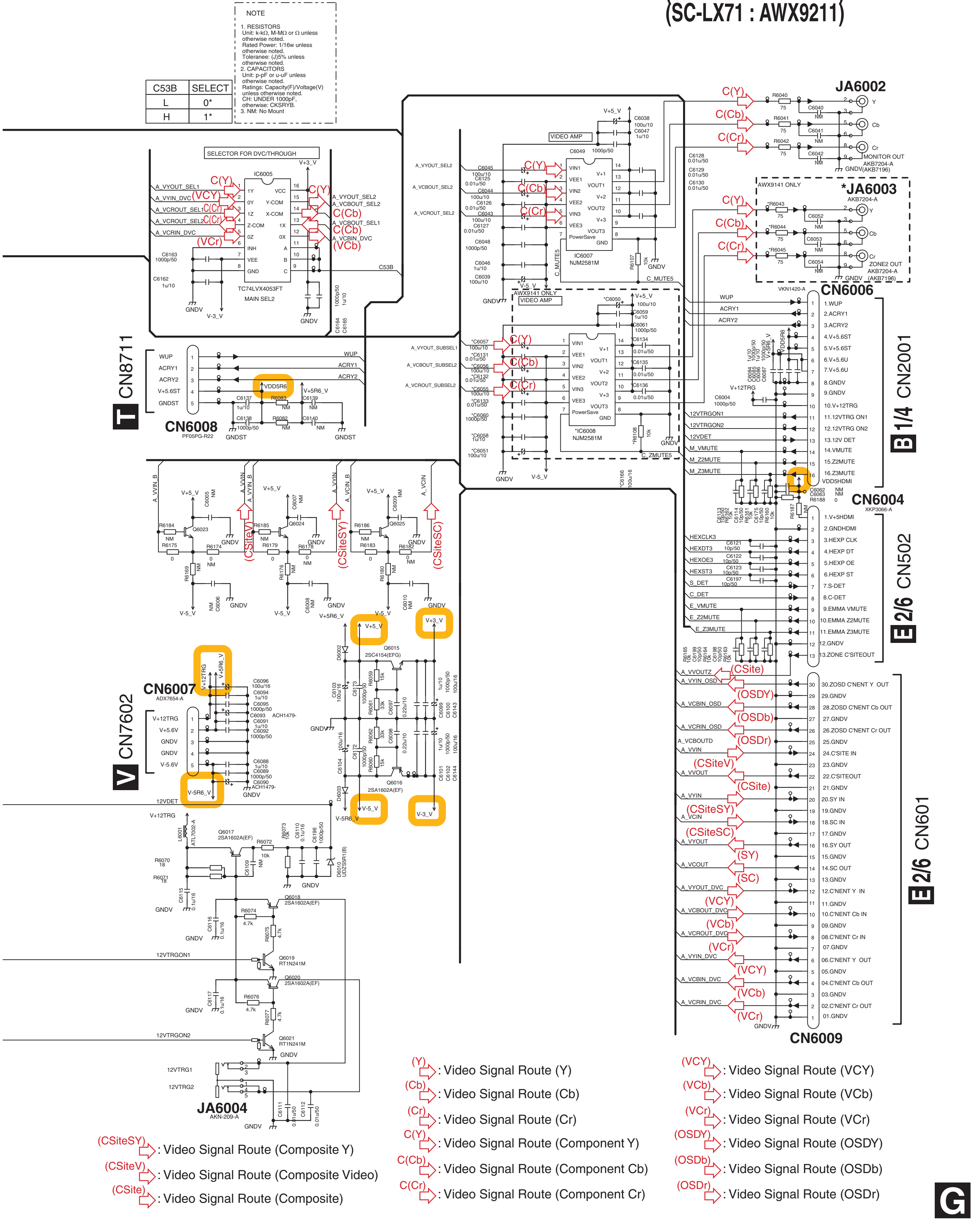
*CSW2	L	L	H	H
*CSW1	L	H	L	H
OUT	0X	1X	2X	3X

(SC) : S-Video Signal Route (C)

(SY) : S-Video Signal Route (Y)

(CSiteSC) : Video Signal Route (Composite C)

G COMPONENT ASSY
(SC-LX81 : AWX9141)
(SC-LX71 : AWX9211)



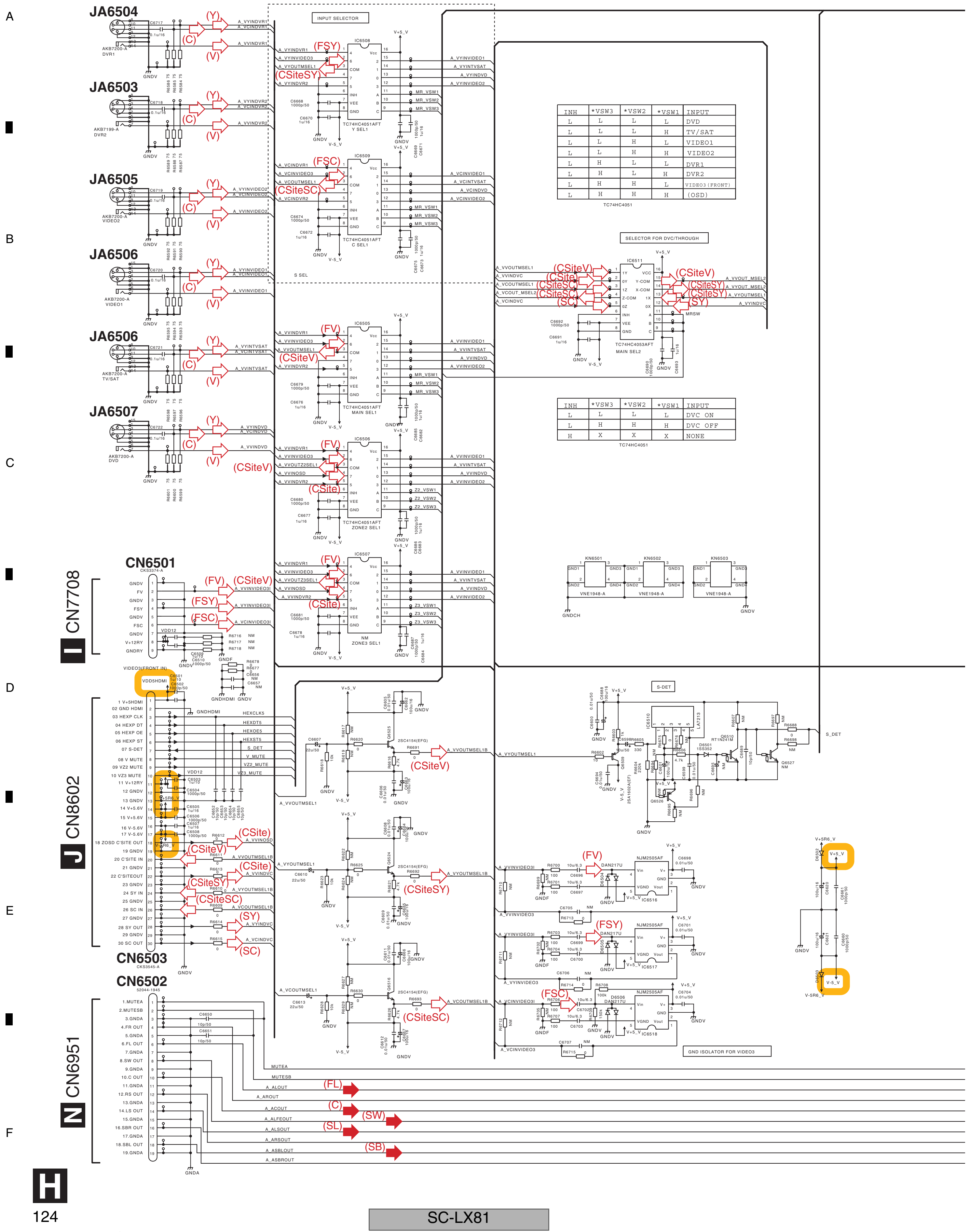
NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Tolerance: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH: UNDER 1000pF, otherwise: CKSRYB.
3. NM: No Mount

C53B	SELECT
L	0*
H	1*

SELECTOR FOR DVC/THROUGH
IC6005 TC74LVX4053FT MAIN SEL2
VIDEO AMP
IC6007 NJM2581M
*IC6008 NJM2581M
AWX9141 ONLY VIDEO AMP
JA6002 AKB7204-A (AKB7196) MONITOR OUT
*JA6003 AKB7204-A (AKB7196) ZONE2 OUT
AWX9141 ONLY
CN6006 VKN1420-A
B 1/4 CN2001
1.WUP
2.ACRY1
3.ACRY2
4.V+5.6ST
5.V+5.6ST
6.V+5.6U
7.V+5.6U
8.GNDV
9.GNDV
10.V+12TRG
11.12VTRG ON1
12.12VTRG ON2
13.12V DET
14.VMUTE
15.Z2MUTE
16.Z3MUTE
CN6004 XKP3066-A
E 2/6 CN502
1.V+5HDMI
2.GNDHDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.C-DET
9.EMMA VMUTE
10.EMMA Z2MUTE
11.EMMA Z3MUTE
12.GNDV
13.ZONE C'SITEOUT
CN6009
E 2/6 CN601
30.ZOSD C'NENT Y OUT
29.GNDV
28.ZOSD C'NENT Cb OUT
27.GNDV
26.ZOSD C'NENT Cr OUT
25.GNDV
24.C'SITE IN
23.GNDV
22.C'SITEOUT
21.GNDV
20.SY IN
19.GNDV
18.SC IN
17.GNDV
16.SY OUT
15.GNDV
14.SC OUT
13.GNDV
12.C'NENT Y IN
11.GNDV
10.C'NENT Cb IN
09.GNDV
08.C'NENT Cr IN
07.GNDV
06.C'NENT Y OUT
05.GNDV
04.C'NENT Cb OUT
03.GNDV
02.C'NENT Cr OUT
01.GNDV
T CN8711
CN6008 PF05PG-R22
WUP ACRY1 ACRY2 V+5.6ST GNDST
V CN7602
CN6007 ADX7654-A
V+12TRG V+5.6V GNDV GNDV V-5.6V
JA6004 AKN-209-A
12VTRG1 12VTRG2
12VTRGON1 12VTRGON2 12VDET
Q6015 2SC4154(EFG)
Q6016 2SA1602A(EF)
Q6017 2SA1602A(EF)
Q6018 2SA1602A(EF)
Q6019 RT1N241M
Q6020 2SA1602A(EF)
Q6021 RT1N241M
Q6023 Q6024 Q6025
L6001 ATL7002-A
D6010 UDZS5R1(B)
ACH1479-
V+5_V V-5_V V+3_V V-3_V V+5R6_V V-5R6_V V+12TRG VDD5R6 VDD5HDMI
C_MUTE5 C_ZMUTE5
(CSiteV) (CSiteSY) (CSiteSC) (CSite) (OSDY) (OSDb) (OSDr) (SY) (SC) (VCY) (VCb) (VCr) C(Y) C(Cb) C(Cr)

(Y) : Video Signal Route (Y)
(Cb) : Video Signal Route (Cb)
(Cr) : Video Signal Route (Cr)
C(Y) : Video Signal Route (Component Y)
C(Cb) : Video Signal Route (Component Cb)
C(Cr) : Video Signal Route (Component Cr)
(VCY) : Video Signal Route (VCY)
(VCb) : Video Signal Route (VCb)
(VCr) : Video Signal Route (VCr)
(OSDY) : Video Signal Route (OSDY)
(OSDb) : Video Signal Route (OSDb)
(OSDr) : Video Signal Route (OSDr)
(CSiteSY) : Video Signal Route (Composite Y)
(CSiteV) : Video Signal Route (Composite Video)
(CSite) : Video Signal Route (Composite)

10.16 COMPOSITE S ASSY


A
B
C
D
E
F
JA6504
AKB7200-A DVR1
JA6503
AKB7199-A DVR2
JA6505
AKB7200-A VIDEO2
JA6506
AKB7200-A VIDEO1
JA6506
AKB7200-A TV/SAT
JA6507
AKB7200-A DVD
(Y)
(C)
(V)
(CSiteV)
INPUT SELECTOR
S SEL
IC6508
TC74HC4051AFT Y SEL1
IC6509
TC74HC4051AFT C SEL1
IC6505
TC74HC4051AFT MAIN SEL1
IC6506
TC74HC4051AFT ZONE2 SEL1
IC6507
ZONE3 SEL1
(FSY)
(CSiteSY)
(FSC)
(CSiteSC)
(FV)
(CSiteV)
(CSite)
SELECTOR FOR DVC/THROUGH
IC6511
TC74HC4053AFT MAIN SEL2
(SC)
(SY)
(CSiteSY)
(CSiteSC)
KN6501
KN6502
KN6503
VNE1948-A
GNDCH
GNDV
CN6501
CKS3374-A
CN7708
I
VIDEO3(FRONT IN)
VDD5HDMI
CN8602
J
1 V+5HDMI
02 GND HDMI
03 HEXP CLK
04 HEXP DT
05 HEXP OE
06 HEXP ST
07 S-DET
08 V MUTE
09 VZ2 MUTE
10 VZ3 MUTE
11 V+12RY
12 GNDV
13 GNDV
14 V+5.6V
15 V+5.6V
16 V-5.6V
17 V-5.6V
18 ZOSD C'SITE OUT
19 GNDV
20 C'SITE IN
21 GNDV
22 C'SITEOUT
23 GNDV
24 SY IN
25 GNDV
26 SC IN
27 GNDV
28 SY OUT
29 GNDV
30 SC OUT
CN6503
CKS3545-A
CN6502
52044-1945
CN6951
N
1.MUTEA
2.MUTESB
3.GNDA
4.FR OUT
5.GNDA
6.FL OUT
7.GNDA
8.SW OUT
9.GNDA
10.C OUT
11.GNDA
12.RS OUT
13.GNDA
14.LS OUT
15.GNDA
16.SBR OUT
17.GNDA
18.SBL OUT
19.GNDA
(FL)
(C)
(SW)
(SL)
(SB)
2SC4154(EFG)
A_VVOUTMSEL1B
A_VYOUTMSEL1B
A_VCOUTMSEL1B
S-DET
IC6510
LA7213
S_DET
NJM2505AF
IC6516
IC6517
IC6518
DAN217U
GND ISOLATOR FOR VIDEO3
V+5R6_V
V+5_V
V-5_V
V-5R6_V

INH	*VSW3	*VSW2	*VSW1	INPUT
L	L	L	L	DVD
L	L	L	H	TV/SAT
L	L	H	L	VIDEO1
L	L	H	H	VIDEO2
L	H	L	L	DVR1
L	H	L	H	DVR2
L	H	H	L	VIDEO3(FRONT)
L	H	H	H	(OSD)

TC74HC4051

INH	*VSW3	*VSW2	*VSW1	INPUT
L	L	L	L	DVC ON
L	H	H	H	DVC OFF
H	X	X	X	NONE

TC74HC4051

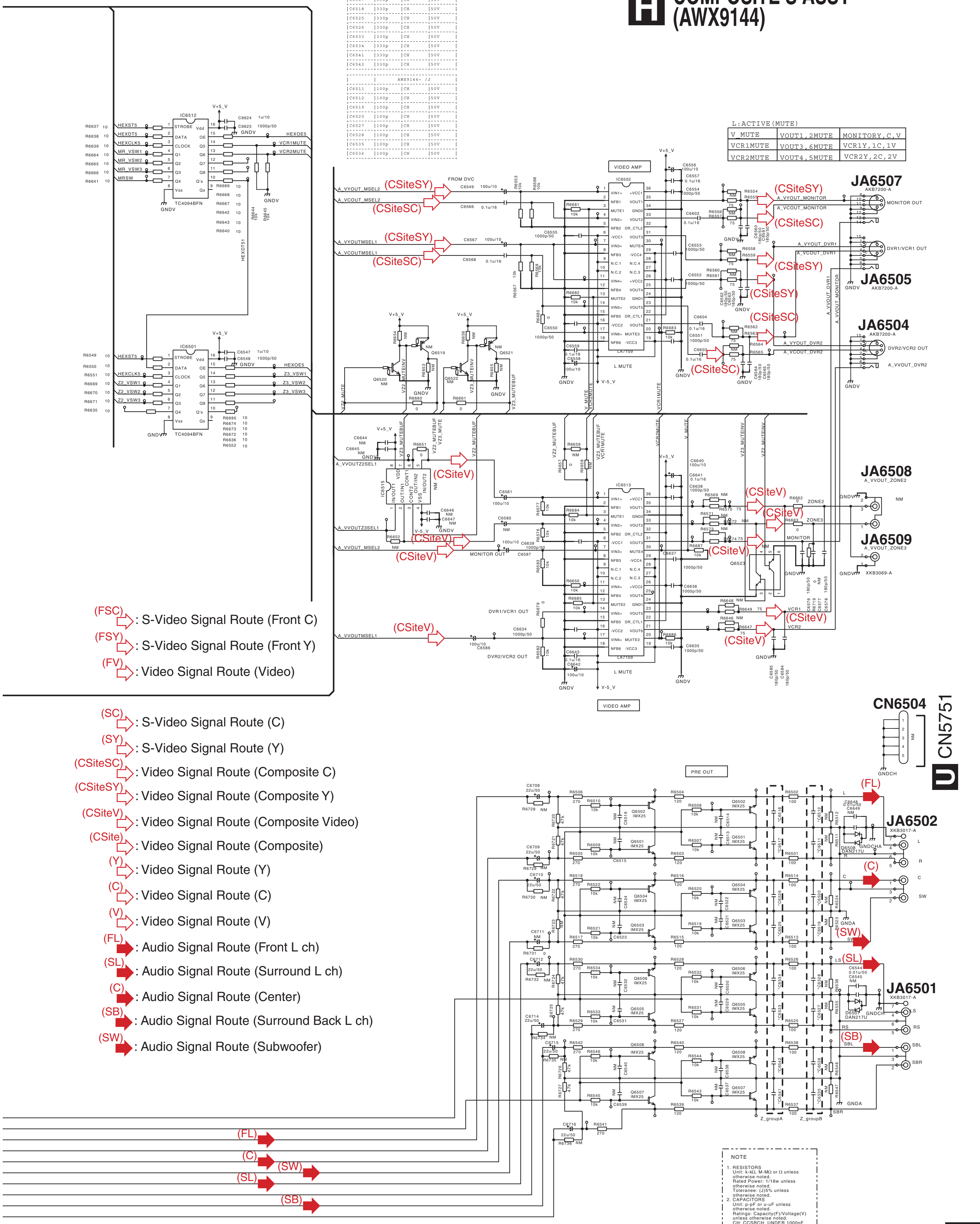
H COMPOSITE S ASSY (AWX9144)

	AWX9144- /J		
C6517	330p	CH	50V
C6518	330p	CH	50V
C6525	330p	CH	50V
C6526	330p	CH	50V
C6533	330p	CH	50V
C6534	330p	CH	50V
C6541	330p	CH	50V
C6542	330p	CH	50V

	AWX9144- /J		
C6511	100p	CH	50V
C6512	100p	CH	50V
C6519	100p	CH	50V
C6520	100p	CH	50V
C6527	100p	CH	50V
C6528	100p	CH	50V
C6535	100p	CH	50V
C6536	100p	CH	50V

L:ACTIVE(MUTE)

V_MUTE	VOUT1,2MUTE	MONITORY,C,V
VCR1MUTE	VOUT3,6MUTE	VCR1Y,1C,1V
VCR2MUTE	VOUT4,5MUTE	VCR2Y,2C,2V



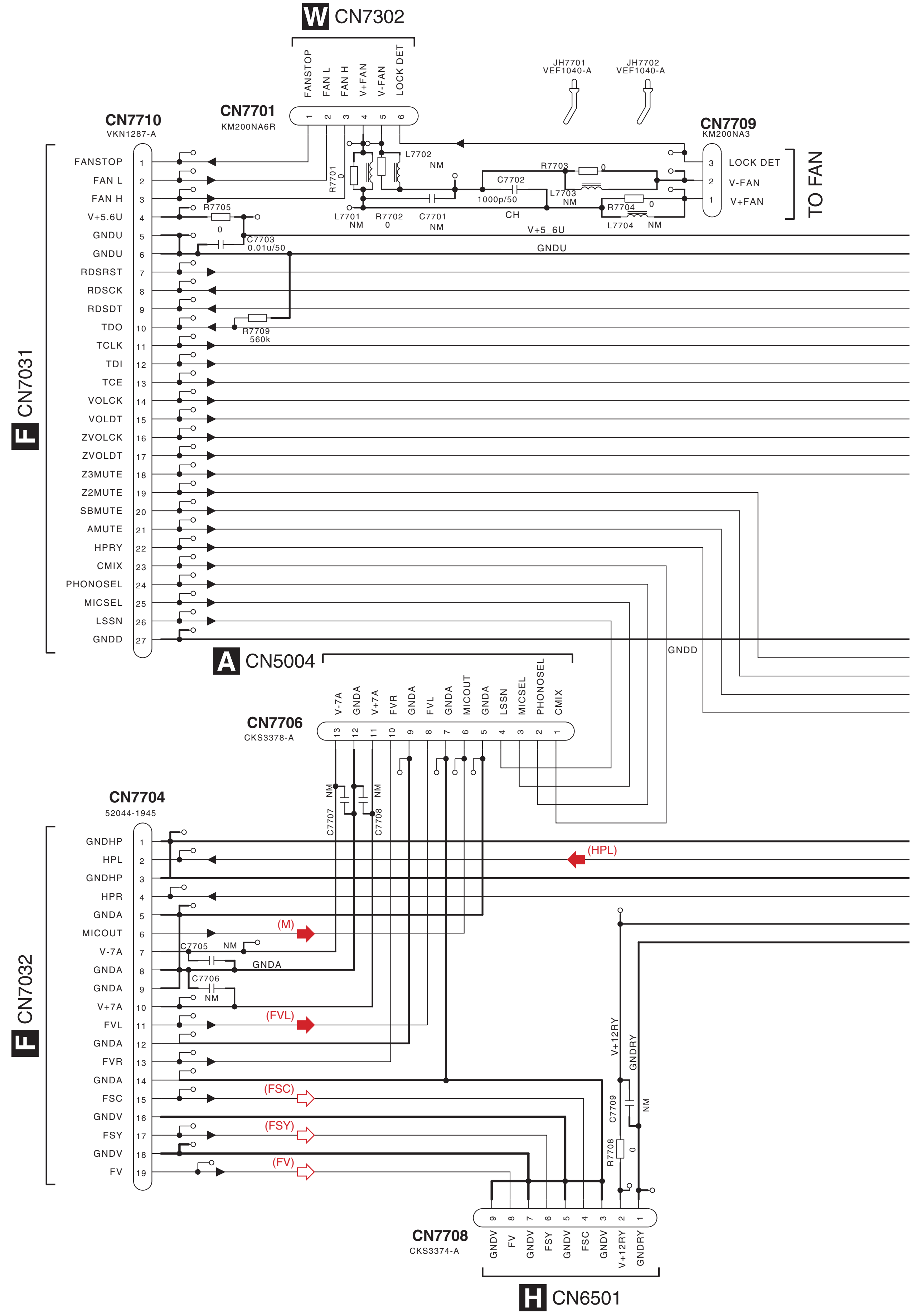
A
B
C
D
E
F
IC6512
TC4094BFN
IC6501
IC6502
IC6513
LA7109
IC6515
VIDEO AMP
PRE OUT
FROM DVC
MONITOR OUT
DVR1/VCR1 OUT
DVR2/VCR2 OUT
L MUTE
HEXDT5
HEXCLK5
HEXSTS
HEXOE5
VCR1MUTE
VCR2MUTE
Z3_VSW1
Z3_VSW2
Z3_VSW3
A_VYOUT_MSEL2
A_VCOUT_MSEL2
A_VYOUTMSEL1
A_VCOUTMSEL1
A_VVOUTZ2SEL1
A_VVOUTZ3SEL1
A_VVOUT_MSEL2
A_VVOUTMSEL1
A_VYOUT_MONITOR
A_VCOUT_MONITOR
A_VYOUT_DVR1
A_VCOUT_DVR1
A_VYOUT_DVR2
A_VCOUT_DVR2
A_VVOUT_DVR2
(CSiteSY)
(CSiteSC)
(CSiteV)
JA6507
AKB7200-A
JA6505
AKB7200-A
JA6504
AKB7200-A
JA6508
A_VVOUT_ZONE2
JA6509
A_VVOUT_ZONE3
XKB3069-A
ZONE2
ZONE3
MONITOR
VCR1
VCR2
CN6504
CN5751
U
JA6502
XKB3017-A
JA6501
XKB3017-A
Z_groupA
Z_groupB
(FL)
(C)
(SW)
(SL)
(SB)
GNDV
GNDA
GNDCH
V+5_V
V-5_V

(FSC) : S-Video Signal Route (Front C)
(FSY) : S-Video Signal Route (Front Y)
(FV) : Video Signal Route (Video)
(SC) : S-Video Signal Route (C)
(SY) : S-Video Signal Route (Y)
(CSiteSC) : Video Signal Route (Composite C)
(CSiteSY) : Video Signal Route (Composite Y)
(CSiteV) : Video Signal Route (Composite Video)
(CSite) : Video Signal Route (Composite)
(Y) : Video Signal Route (Y)
(C) : Video Signal Route (C)
(V) : Video Signal Route (V)
(FL) : Audio Signal Route (Front L ch)
(SL) : Audio Signal Route (Surround L ch)
(C) : Audio Signal Route (Center)
(SB) : Audio Signal Route (Surround Back L ch)
(SW) : Audio Signal Route (Subwoofer)

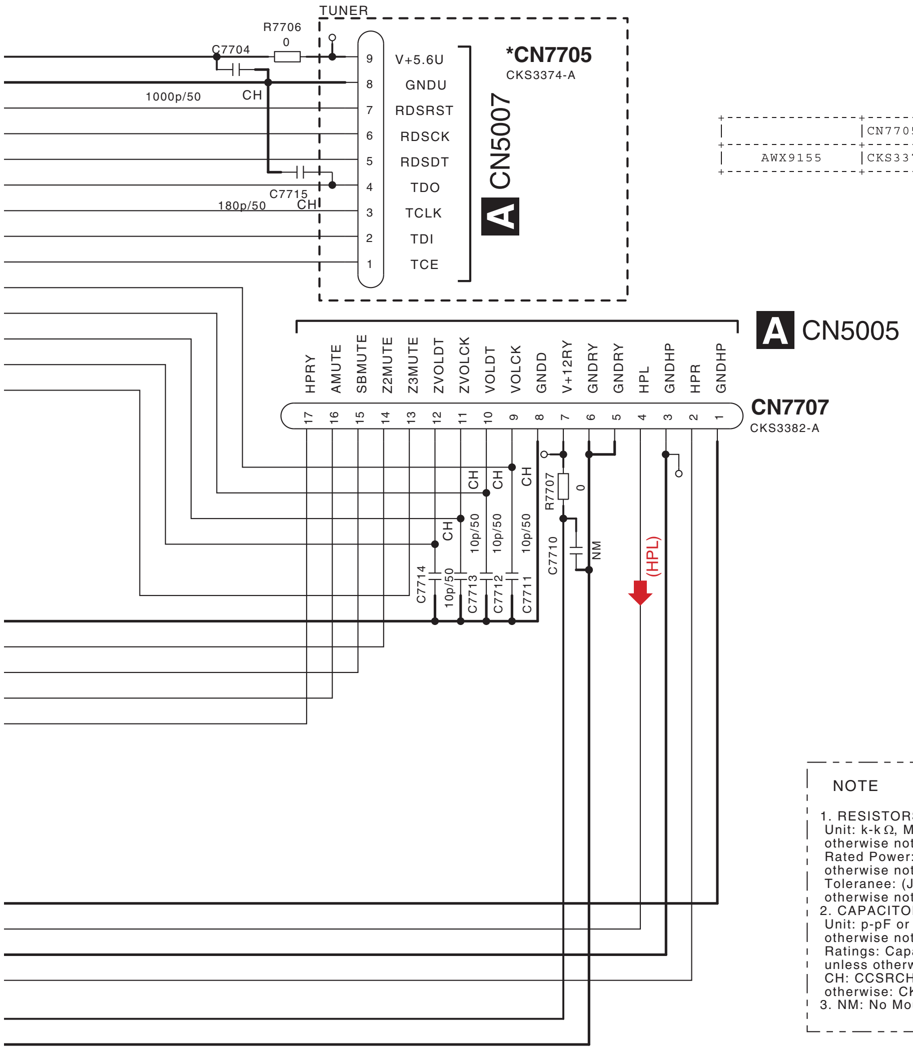
NOTE

1. RESISTORS
   Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
   Rated Power: 1/16w unless otherwise noted.
   Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
   Unit: p-pF or u-uF unless otherwise noted.
   Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
   CH: CCSRCH, UNDER 1000pF otherwise: CKSRYB.
3. NM: No Mount

10.17 FRONT BRIDGE ASSY


W CN7302
FANSTOP
FAN L
FAN H
V+FAN
V-FAN
LOCK DET
CN7701
KM200NA6R
JH7701
VEF1040-A
JH7702
VEF1040-A
CN7710
VKN1287-A
CN7709
KM200NA3
LOCK DET
V-FAN
V+FAN
TO FAN
R7701
0
L7702
NM
R7703
0
C7702
1000p/50
L7703
NM
R7704
0
L7704
NM
CH
L7701
NM
R7702
0
C7701
NM
R7705
0
C7703
0.01u/50
V+5_6U
GNDU
R7709
560k
F CN7031
FANSTOP 1
FAN L 2
FAN H 3
V+5.6U 4
GNDU 5
GNDU 6
RDSRST 7
RDSCK 8
RDSDT 9
TDO 10
TCLK 11
TDI 12
TCE 13
VOLCK 14
VOLDT 15
ZVOLCK 16
ZVOLDT 17
Z3MUTE 18
Z2MUTE 19
SBMUTE 20
AMUTE 21
HPRY 22
CMIX 23
PHONOSEL 24
MICSEL 25
LSSN 26
GNDD 27
GNDD
A CN5004
V-7A
GNDA
V+7A
FVR
GNDA
FVL
GNDA
MICOUT
GNDA
LSSN
MICSEL
PHONOSEL
CMIX
CN7706
CKS3378-A
C7707
NM
C7708
NM
CN7704
52044-1945
F CN7032
GNDHP 1
HPL 2
GNDHP 3
HPR 4
GNDA 5
MICOUT 6
V-7A 7
GNDA 8
GNDA 9
V+7A 10
FVL 11
GNDA 12
FVR 13
GNDA 14
FSC 15
GNDV 16
FSY 17
GNDV 18
FV 19
(HPL)
(M)
C7705
NM
GNDA
C7706
NM
(FVL)
(FSC)
(FSY)
(FV)
V+12RY
GNDRY
C7709
NM
R7708
0
CN7708
CKS3374-A
GNDV
FV
GNDV
FSY
GNDV
FSC
GNDV
V+12RY
GNDRY
H CN6501

I FRONT BRIDGE ASSY (AWX9155)


TUNER
R7706
0
C7704
1000p/50
CH
C7715
180p/50
CH
*CN7705
CKS3374-A
A CN5007
9 V+5.6U
8 GNDU
7 RDSRST
6 RDSCK
5 RDSDT
4 TDO
3 TCLK
2 TDI
1 TCE
A CN5005
CN7707
CKS3382-A
17 HPRY
16 AMUTE
15 SBMUTE
14 Z2MUTE
13 Z3MUTE
12 ZVOLDT
11 ZVOLCK
10 VOLDT
9 VOLCK
8 GNDD
7 V+12RY
6 GNDRY
5 GNDRY
4 HPL
3 GNDHP
2 HPR
1 GNDHP
CH
CH
CH
CH
10p/50
10p/50
10p/50
10p/50
C7714
C7713
C7712
C7711
R7707
0
C7710
NM
(HPL)

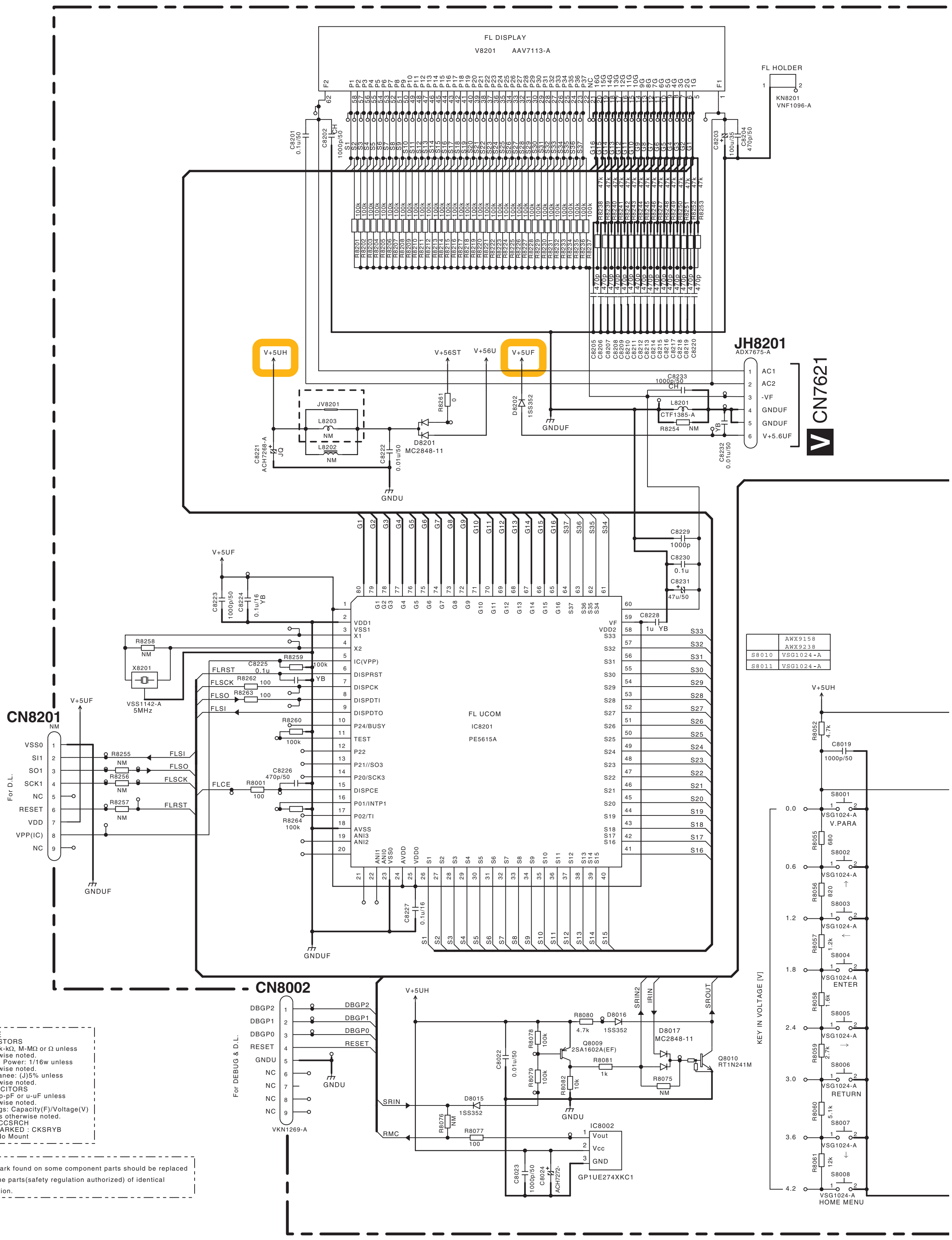
	CN7705
AWX9155	CKS3374-A

NOTE

1. RESISTORS
   Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
   Rated Power: 1/16w unless otherwise noted.
   Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
   Unit: p-pF or u-uF unless otherwise noted.
   Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
   CH: CCSRCH,
   otherwise: CKSRYB.
3. NM: No Mount

(FSC) ⇨ : S-Video Signal Route (Front C)
(FSY) ⇨ : S-Video Signal Route (Front Y)
(FV) ⇨ : Video Signal Route (Video)
(FVL) ➡ : Audio Signal Route (Video L ch)
(M) ➡ : Audio Signal Route (Mic)
(HPL) ➡ : Audio Signal Route (Headphone L ch)

10.18 DISPLAY, VOL and POWER SW ASSYS


FL DISPLAY
V8201 AAV7113-A
FL HOLDER
KN8201
VNF1096-A
C8201 0.1u/50
C8202 1000p/50 CH
C8203 100u/35
C8204 470p/50
R8201–R8237 100k
R8238–R8253 47k
470p
C8205–C8220
JH8201
ADX7675-A
AC1
AC2
-VF
GNDUF
GNDUF
V+5.6UF
CN7621
V
C8233 1000p/50 CH
L8201 CTF1385-A
R8254 NM
YB
C8232 0.01u/50
GNDUF
V+5UH
V+56ST
V+56U
V+5UF
R8261 0
D8202 1SS352
JV8201
L8203 NM
L8202 NM
D8201 MC2848-11
C8221 ACH7268-A
JQ
C8222 0.01u/50
GNDU
C8229 1000p
C8230 0.1u
C8231 47u/50
C8228 1u YB
V+5UF
C8223 1000p/50
C8224 0.1u/16 YB
R8258 NM
X8201
VSS1142-A 5MHz
R8259 100k
C8225 0.1u
FLRST
FLSCK
FLSO
FLSI
R8262 100
R8263 100
YB
R8260 100k
C8226 470p/50
FLCE
R8001 100
R8264 100k
FL UCOM
IC8201
PE5615A
VDD1
VSS1
X1
X2
IC(VPP)
DISPRST
DISPCK
DISPDTI
DISPDTO
P24/BUSY
TEST
P22
P21//SO3
P20/SCK3
DISPCE
P01/INTP1
P02/TI
AVSS
ANI3
ANI2
ANI1
ANI0
VSS0
AVDD
VDD0
VF
VDD2
C8227 0.1u/16
GNDUF
CN8201
NM
For D.L.
VSS0
SI1
SO1
SCK1
NC
RESET
VDD
VPP(IC)
NC
V+5UF
R8255 NM
R8256 NM
R8257 NM
FLSI
FLSO
FLSCK
FLRST
GNDUF
CN8002
For DEBUG & D.L.
DBGP2
DBGP1
DBGP0
RESET
GNDU
NC
VKN1269-A
GNDU
V+5UH
C8022 0.01u/50
R8078 100k
R8079 100k
Q8009 2SA1602A(EF)
R8080 4.7k
D8016 1SS352
D8017 MC2848-11
R8081 1k
R8082 10k
R8075 NM
Q8010 RT1N241M
SRIN2
IRIN
SROUT
GNDU
SRIN
D8015 1SS352
R8076 NM
RMC
R8077 100
IC8002
Vout
Vcc
GND
GP1UE274XKC1
C8023 1000p/50
C8024 ACH7272-
V+5UH
R8052 4.7k
C8019 1000p/50
KEY IN VOLTAGE [V]
0.0
0.6
1.2
1.8
2.4
3.0
3.6
4.2
S8001 VSG1024-A V.PARA
R8055 680
S8002 VSG1024-A ↑
R8056 820
S8003 VSG1024-A ←
R8057 1.2k
S8004 VSG1024-A ENTER
R8058 1.8k
S8005 VSG1024-A →
R8059 2.7k
S8006 VSG1024-A RETURN
R8060 5.1k
S8007 VSG1024-A ↓
R8061 12k
S8008 VSG1024-A HOME MENU

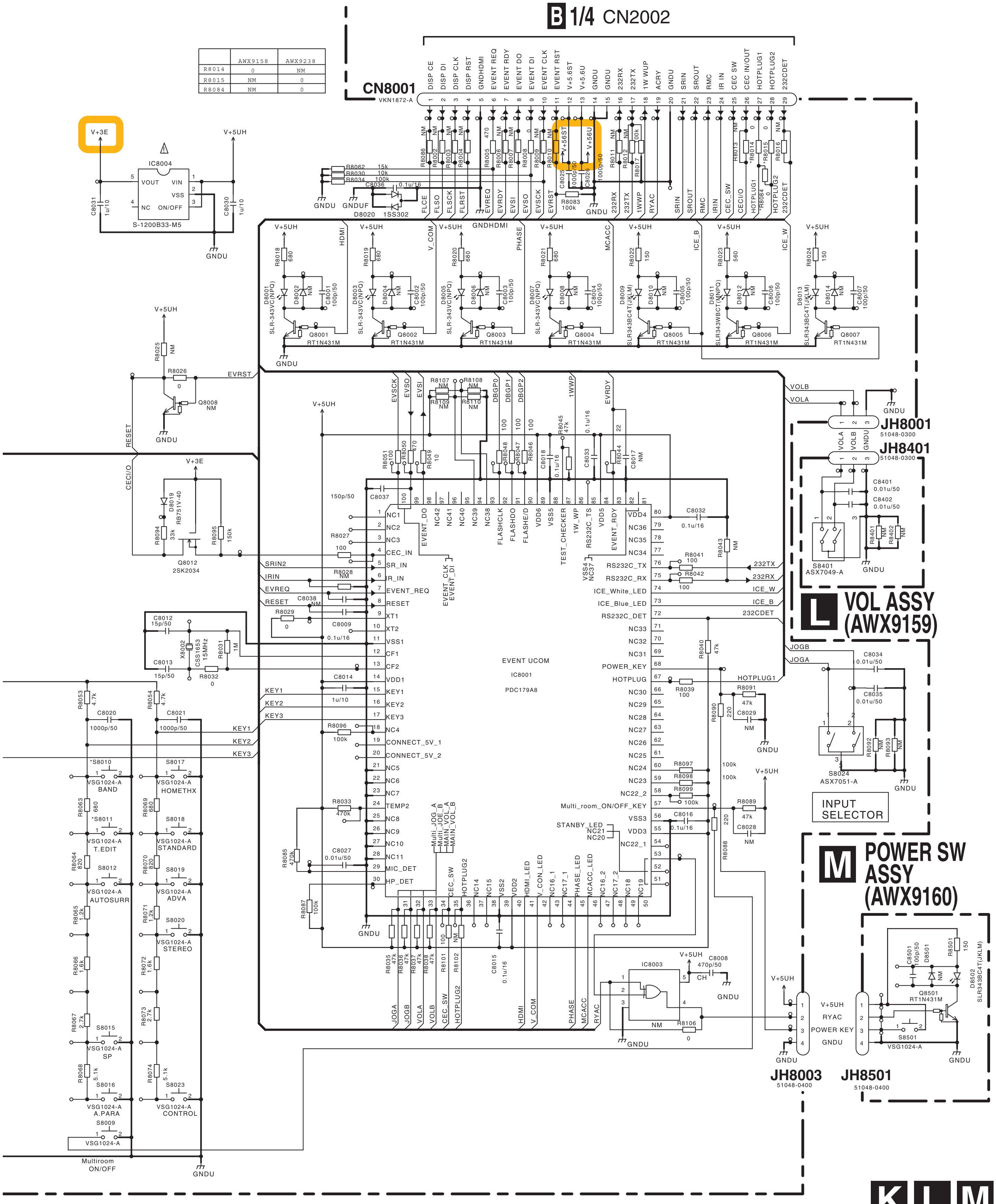
	AWX9158 AWX9238
S8010	VSG1024-A
S8011	VSG1024-A

NOTE
1. RESISTORS
   Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
   Rated Power: 1/16w unless otherwise noted.
   Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
   Unit: p-pF or u-uF unless otherwise noted.
   Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
   CH : CCSRCH
   NO MARKED : CKSRYB
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

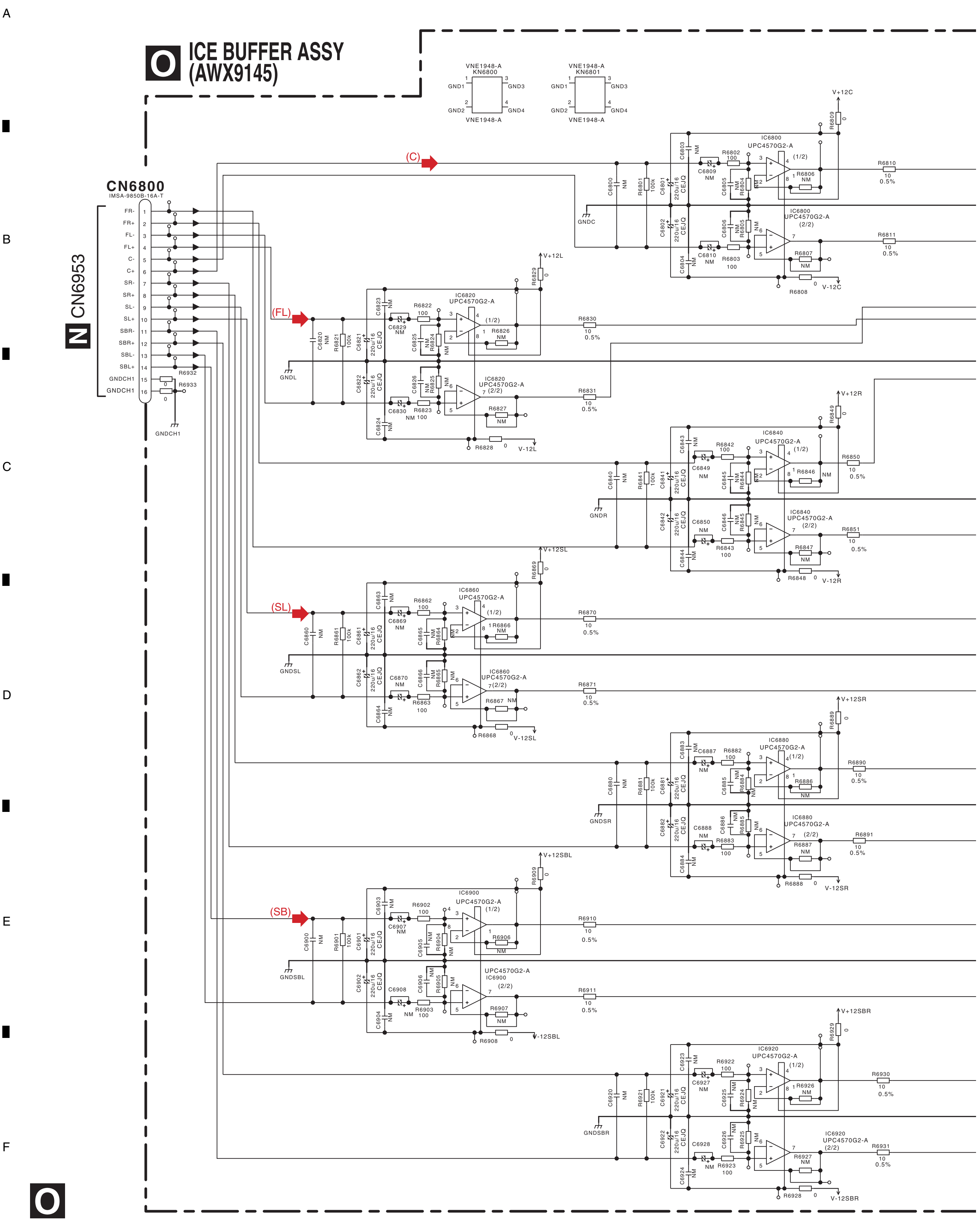
K DISPLAY ASSY (SC-LX81 : AWX9158) (SC-LX71 : AWX9238)

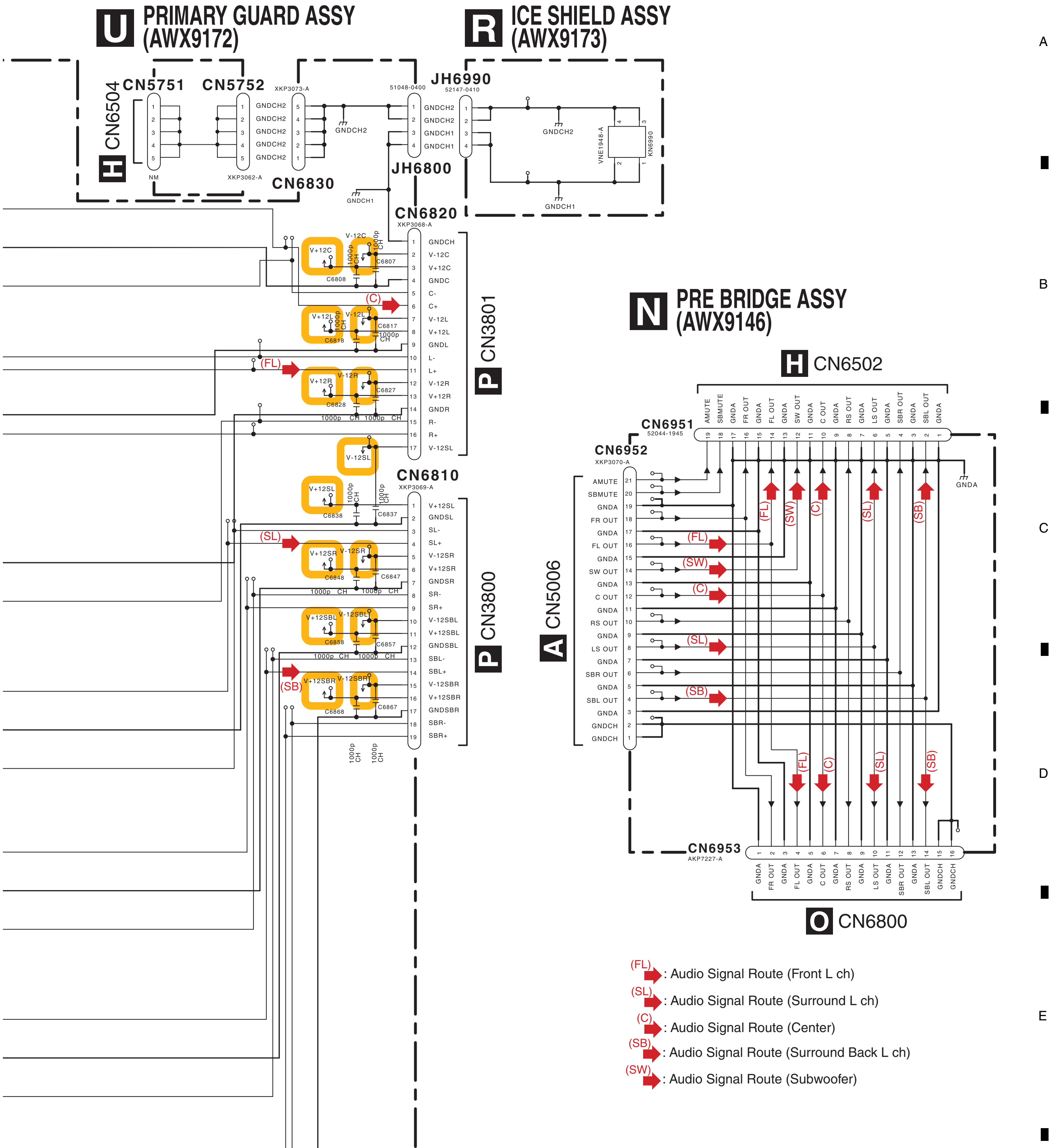
	AWX9158	AWX9238
R8014	0	NM
R8015	NM	0
R8084	NM	0



B 1/4 CN2002
CN8001
VKN1872-A
DISP CE
DISP DI
DISP CLK
DISP RST
GNDHDMI
EVENT REQ
EVENT RDY
EVENT DO
EVENT DI
EVENT CLK
EVENT RST
V+5.6ST
V+5.6U
GNDU
232RX
232TX
1W WUP
ACRY
SRIN
SROUT
RMC
IR IN
CEC SW
CEC IN/OUT
HOTPLUG1
HOTPLUG2
232CDET
V+3E
V+5UH
IC8004
S-1200B33-M5
VOUT
VIN
VSS
NC
ON/OFF
C8031 1u/10
C8030 1u/10
GNDU
GNDUF
D8020 1SS302
R8062 15k
R8030 10k
R8034 100k
C8036 0.1u/16
FLCE
FLSO
FLSCK
FLRST
EVREQ
EVRDY
EVSI
EVSO
EVSCK
EVRST
R8083 100k
1WWP
RYAC
HDMI
V_COM
PHASE
MCACC
ICE_B
ICE_W
Q8001 RT1N431M
Q8002 RT1N431M
Q8003 RT1N431M
Q8004 RT1N431M
Q8005 RT1N431M
Q8006 RT1N431M
Q8007 RT1N431M
D8001 SLR-343VC(NPQ)
D8003 SLR-343VC(NPQ)
D8005 SLR-343VC(NPQ)
D8007 SLR-343VC(NPQ)
D8009 SLR343BC4T(JKLM)
D8011 SLR343WBCT(NPQ)
D8013 SLR343BC4T(JKLM)
R8025 NM
R8026 0
Q8008 NM
EVRST
RESET
CEC I/O
D8019 RB751V-40
R8094 33k
R8095 150k
Q8012 2SK2034
C8012 15p/50
X8002 CSS1653 15MHz
R8031 1M
C8013 15p/50
R8032 0
EVENT UCOM
IC8001
PDC179A8
NC1
NC2
NC3
CEC_IN
SR_IN
IR_IN
EVENT_REQ
RESET
XT1
XT2
VSS1
CF1
CF2
VDD1
KEY1
KEY2
KEY3
NC4
CONNECT_5V_1
CONNECT_5V_2
NC5
NC6
NC7
TEMP2
NC8
NC9
NC10
NC11
MIC_DET
HP_DET
VDD4
NC36
NC35
NC34
RS232C_TX
RS232C_RX
ICE_White_LED
ICE_Blue_LED
RS232C_DET
NC33
NC32
NC31
POWER_KEY
HOTPLUG
NC30
NC29
NC28
NC27
NC26
NC25
NC24
NC23
NC22_2
Multi_room_ON/OFF_KEY
STANBY_LED
NC21
NC20
VSS3
VDD3
NC22_1
EVENT_DO
FLASHCLK
FLASHDO
FLASHE/D
VDD6
VSS5
TEST_CHECKER
1W_WP
RS232C_TS
VDD5
EVENT_RDY
HOTPLUG2
CEC_SW
HDMI_LED
V_CON_LED
PHASE_LED
MCACC_LED
SRIN2
IRIN
EVREQ
RESET
232TX
232RX
ICE_W
ICE_B
232CDET
HOTPLUG1
KEY1
KEY2
KEY3
S8010 VSG1024-A BAND
S8011 VSG1024-A T.EDIT
S8012 VSG1024-A AUTOSURR
S8015 VSG1024-A SP
S8016 VSG1024-A A.PARA
S8009 VSG1024-A
Multiroom ON/OFF
S8017 VSG1024-A HOMETHX
S8018 VSG1024-A STANDARD
S8019 VSG1024-A ADVA
S8020 VSG1024-A STEREO
S8023 VSG1024-A CONTROL
IC8003
C8008 470p/50
R8106 0
JOGA
JOGB
VOLA
VOLB
VOLB
VOLA
GNDU
JH8001 51048-0300
JH8401 51048-0300
C8401 0.01u/50
C8402 0.01u/50
S8401 ASX7049-A
L VOL ASSY (AWX9159)
JOGB
JOGA
C8034 0.01u/50
C8035 0.01u/50
S8024 ASX7051-A
INPUT SELECTOR
M POWER SW ASSY (AWX9160)
V+5UH
RYAC
POWER KEY
GNDU
JH8003 51048-0400
JH8501 51048-0400
Q8501 RT1N431M
D8502 SLR343BC4T(JKLM)
S8501 VSG1024-A
A
B
C
D
E
F

10.19 PRE BRIDGE, ICE BUFFER, ICE SHIELD and PRIMARY GUARD ASSYS


A
B
C
D
E
F
O ICE BUFFER ASSY
(AWX9145)
N CN6953
CN6800
IMSA-9850B-16A-T
FR- 1
FR+ 2
FL- 3
FL+ 4
C- 5
C+ 6
SR- 7
SR+ 8
SL- 9
SL+ 10
SBR- 11
SBR+ 12
SBL- 13
SBL+ 14
GNDCH1 15
GNDCH1 16
R6932 0
R6933 0
GNDCH1
VNE1948-A
KN6800
VNE1948-A
KN6801
GND1
GND2
GND3
GND4
(C)
(FL)
(SL)
(SB)
IC6800 UPC4570G2-A (1/2)
IC6800 UPC4570G2-A (2/2)
IC6820 UPC4570G2-A (1/2)
IC6820 UPC4570G2-A (2/2)
IC6840 UPC4570G2-A (1/2)
IC6840 UPC4570G2-A (2/2)
IC6860 UPC4570G2-A (1/2)
IC6860 UPC4570G2-A (2/2)
IC6880 UPC4570G2-A (1/2)
IC6880 UPC4570G2-A (2/2)
IC6900 UPC4570G2-A (1/2)
IC6900 UPC4570G2-A (2/2)
IC6920 UPC4570G2-A (1/2)
IC6920 UPC4570G2-A (2/2)
V+12C
V-12C
V+12L
V-12L
V+12R
V-12R
V+12SL
V-12SL
V+12SR
V-12SR
V+12SBL
V-12SBL
V+12SBR
V-12SBR
GNDC
GNDL
GNDR
GNDSL
GNDSR
GNDSBL
GNDSBR
R6810 10 0.5%
R6811 10 0.5%
R6830 10 0.5%
R6831 10 0.5%
R6850 10 0.5%
R6851 10 0.5%
R6870 10 0.5%
R6871 10 0.5%
R6890 10 0.5%
R6891 10 0.5%
R6910 10 0.5%
R6911 10 0.5%
R6930 10 0.5%
R6931 10 0.5%
220u/16 CEJQ
100k
NM
100


U PRIMARY GUARD ASSY (AWX9172)
R ICE SHIELD ASSY (AWX9173)
H CN6504
CN5751
CN5752
NM
XKP3062-A
XKP3073-A
GNDCH2
GNDCH2
GNDCH2
GNDCH2
GNDCH2
CN6830
GNDCH1
51048-0400
JH6990
52147-0410
GNDCH2
GNDCH2
GNDCH1
GNDCH1
JH6800
VNE1948-A
KN6990
GNDCH1
CN6820
XKP3068-A
GNDCH
V-12C
V+12C
GNDC
C-
C+
V-12L
V+12L
GNDL
L-
L+
V-12R
V+12R
GNDR
R-
R+
V-12SL
P CN3801
C6807
C6808
C6817
C6818
C6827
C6828
1000p CH
(C)
(FL)
(SL)
(SB)
CN6810
XKP3069-A
V+12SL
GNDSL
SL-
SL+
V-12SR
V+12SR
GNDSR
SR-
SR+
V-12SBL
V+12SBL
GNDSBL
SBL-
SBL+
V-12SBR
V+12SBR
GNDSBR
SBR-
SBR+
C6837
C6838
C6847
C6848
C6857
C6858
C6867
C6868
P CN3800
N PRE BRIDGE ASSY (AWX9146)
H CN6502
AMUTE
SBMUTE
GNDA
FR OUT
GNDA
FL OUT
GNDA
SW OUT
GNDA
C OUT
GNDA
RS OUT
GNDA
LS OUT
GNDA
SBR OUT
GNDA
SBL OUT
GNDA
CN6951
52044-1945
CN6952
XKP3070-A
A CN5006
AMUTE
SBMUTE
GNDA
FR OUT
GNDA
FL OUT
GNDA
SW OUT
GNDA
C OUT
GNDA
RS OUT
GNDA
LS OUT
GNDA
SBR OUT
GNDA
SBL OUT
GNDA
GNDCH
GNDCH
(FL)
(SW)
(C)
(SL)
(SB)
CN6953
AKP7227-A
GNDA
FR OUT
GNDA
FL OUT
GNDA
C OUT
GNDA
RS OUT
GNDA
LS OUT
GNDA
SBR OUT
GNDA
SBL OUT
GNDCH
GNDCH
O CN6800
A
B
C
D
E
F

(FL) ➡ : Audio Signal Route (Front L ch)

(SL) ➡ : Audio Signal Route (Surround L ch)

(C) ➡ : Audio Signal Route (Center)

(SB) ➡ : Audio Signal Route (Surround Back L ch)

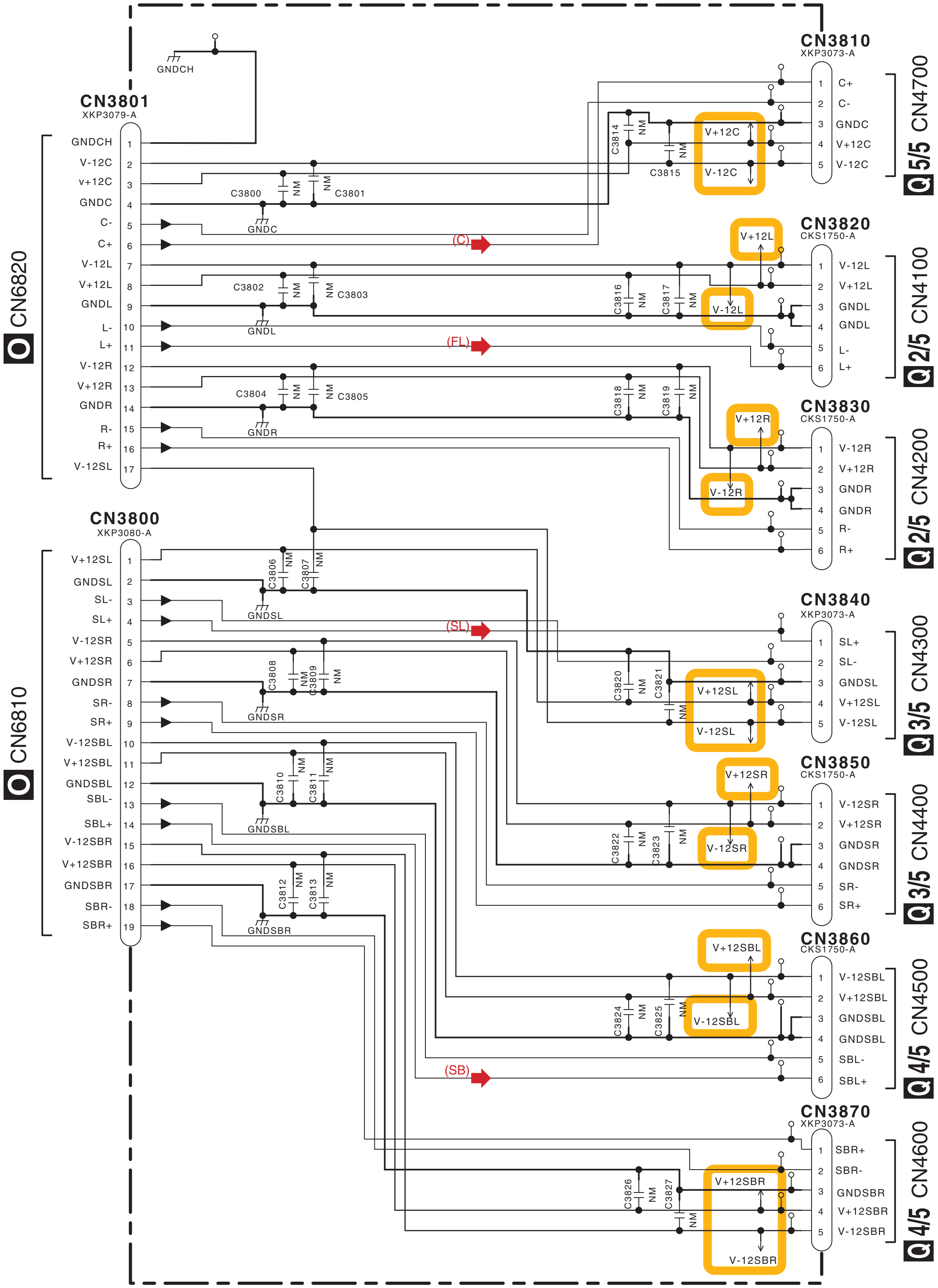
(SW) ➡ : Audio Signal Route (Subwoofer)

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16W unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB,CH:CCSRCH
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

10.20 ICE INTERFACE and ZOUT ASSYS

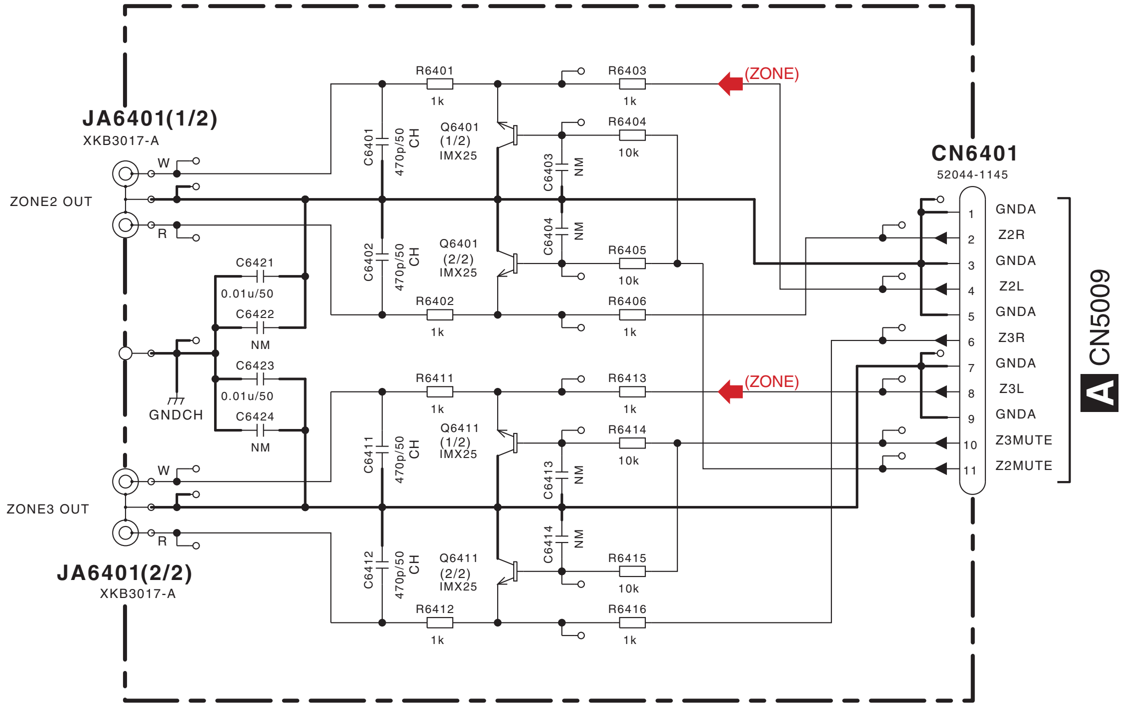
P ICE INTERFACE ASSY (AWX9137)


CN3801
XKP3079-A
GNDCH
V-12C
v+12C
GNDC
C-
C+
V-12L
V+12L
GNDL
L-
L+
V-12R
V+12R
GNDR
R-
R+
V-12SL
O CN6820
CN3800
XKP3080-A
V+12SL
GNDSL
SL-
SL+
V-12SR
V+12SR
GNDSR
SR-
SR+
V-12SBL
V+12SBL
GNDSBL
SBL-
SBL+
V-12SBR
V+12SBR
GNDSBR
SBR-
SBR+
O CN6810
GNDCH
C3800
C3801
C3802
C3803
C3804
C3805
C3806
C3807
C3808
C3809
C3810
C3811
C3812
C3813
C3814
C3815
C3816
C3817
C3818
C3819
C3820
C3821
C3822
C3823
C3824
C3825
C3826
C3827
NM
GNDC
GNDL
GNDR
GNDSL
GNDSR
GNDSBL
GNDSBR
(C)
(FL)
(SL)
(SB)
V+12C
V-12C
V+12L
V-12L
V+12R
V-12R
V+12SL
V-12SL
V+12SR
V-12SR
V+12SBL
V-12SBL
V+12SBR
V-12SBR
CN3810
XKP3073-A
C+
C-
GNDC
V+12C
V-12C
Q 5/5 CN4700
CN3820
CKS1750-A
V-12L
V+12L
GNDL
GNDL
L-
L+
Q 2/5 CN4100
CN3830
CKS1750-A
V-12R
V+12R
GNDR
GNDR
R-
R+
Q 2/5 CN4200
CN3840
XKP3073-A
SL+
SL-
GNDSL
V+12SL
V-12SL
Q 3/5 CN4300
CN3850
CKS1750-A
V-12SR
V+12SR
GNDSR
GNDSR
SR-
SR+
Q 3/5 CN4400
CN3860
CKS1750-A
V-12SBL
V+12SBL
GNDSBL
GNDSBL
SBL-
SBL+
Q 4/5 CN4500
CN3870
XKP3073-A
SBR+
SBR-
GNDSBR
V+12SBR
V-12SBR
Q 4/5 CN4600

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB,CH:CCSRCH
3. NM: No Mount

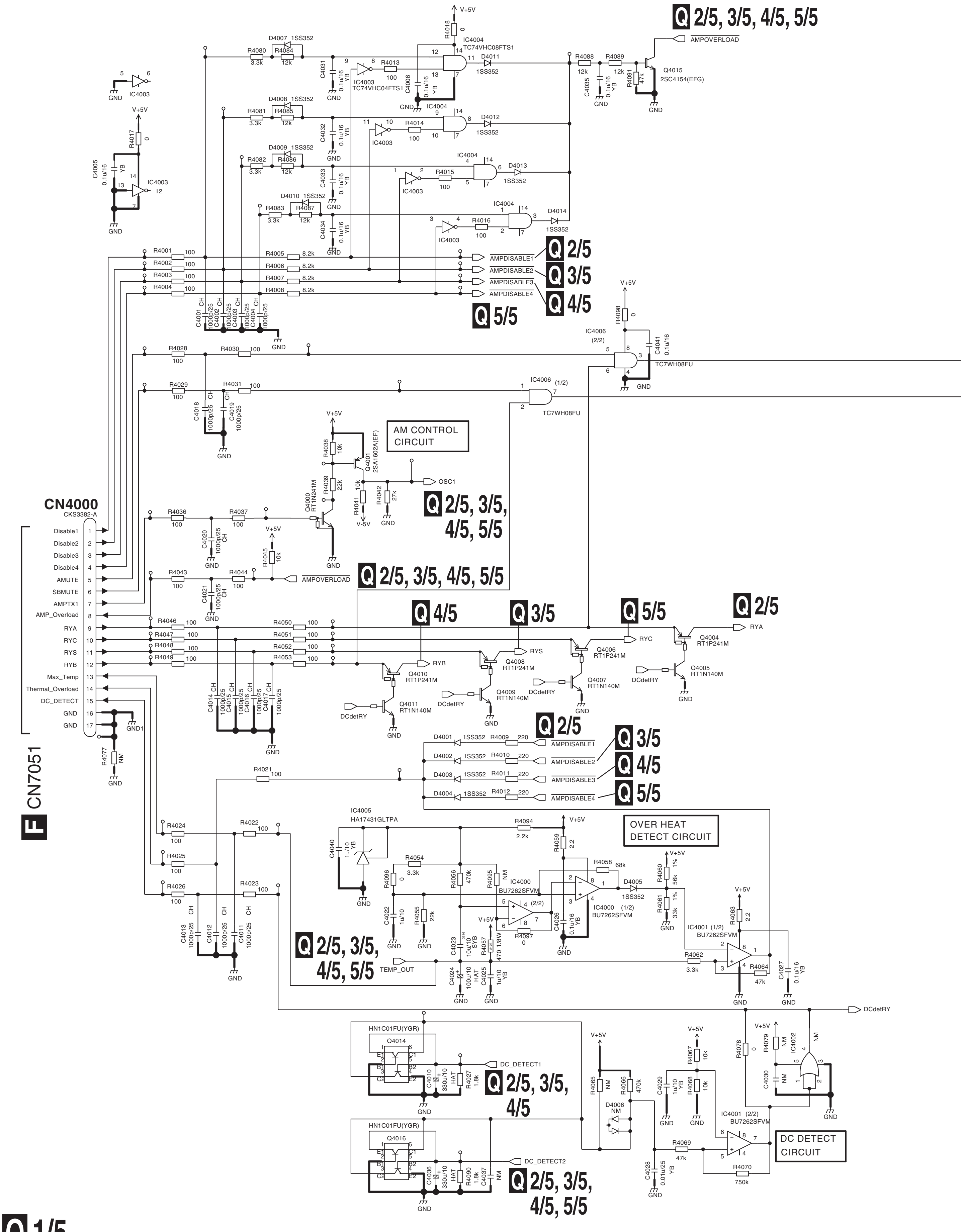
1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

S ZOUT ASSY (AWX9143)


JA6401(1/2)
XKB3017-A
W
ZONE2 OUT
R
C6421
0.01u/50
C6422
NM
C6423
0.01u/50
C6424
NM
GNDCH
W
ZONE3 OUT
R
JA6401(2/2)
XKB3017-A
R6401
1k
C6401
470p/50
CH
Q6401
(1/2)
IMX25
R6403
1k
(ZONE)
R6404
10k
C6403
NM
C6404
NM
C6402
470p/50
CH
Q6401
(2/2)
IMX25
R6405
10k
R6402
1k
R6406
1k
R6411
1k
R6413
1k
(ZONE)
C6411
470p/50
CH
Q6411
(1/2)
IMX25
R6414
10k
C6413
NM
C6414
NM
C6412
470p/50
CH
Q6411
(2/2)
IMX25
R6415
10k
R6412
1k
R6416
1k
CN6401
52044-1145
1 GNDA
2 Z2R
3 GNDA
4 Z2L
5 GNDA
6 Z3R
7 GNDA
8 Z3L
9 GNDA
10 Z3MUTE
11 Z2MUTE
A CN5009

(FL) ➡: Audio Signal Route (Front L ch)
(SL) ➡: Audio Signal Route (Surround L ch)
(C) ➡: Audio Signal Route (Center)
(SB) ➡: Audio Signal Route (Surround Back L ch)
(ZONE) ➡: Audio Signal Route (Zone L ch)

10.21 ICEPOWER AMP (1/5)

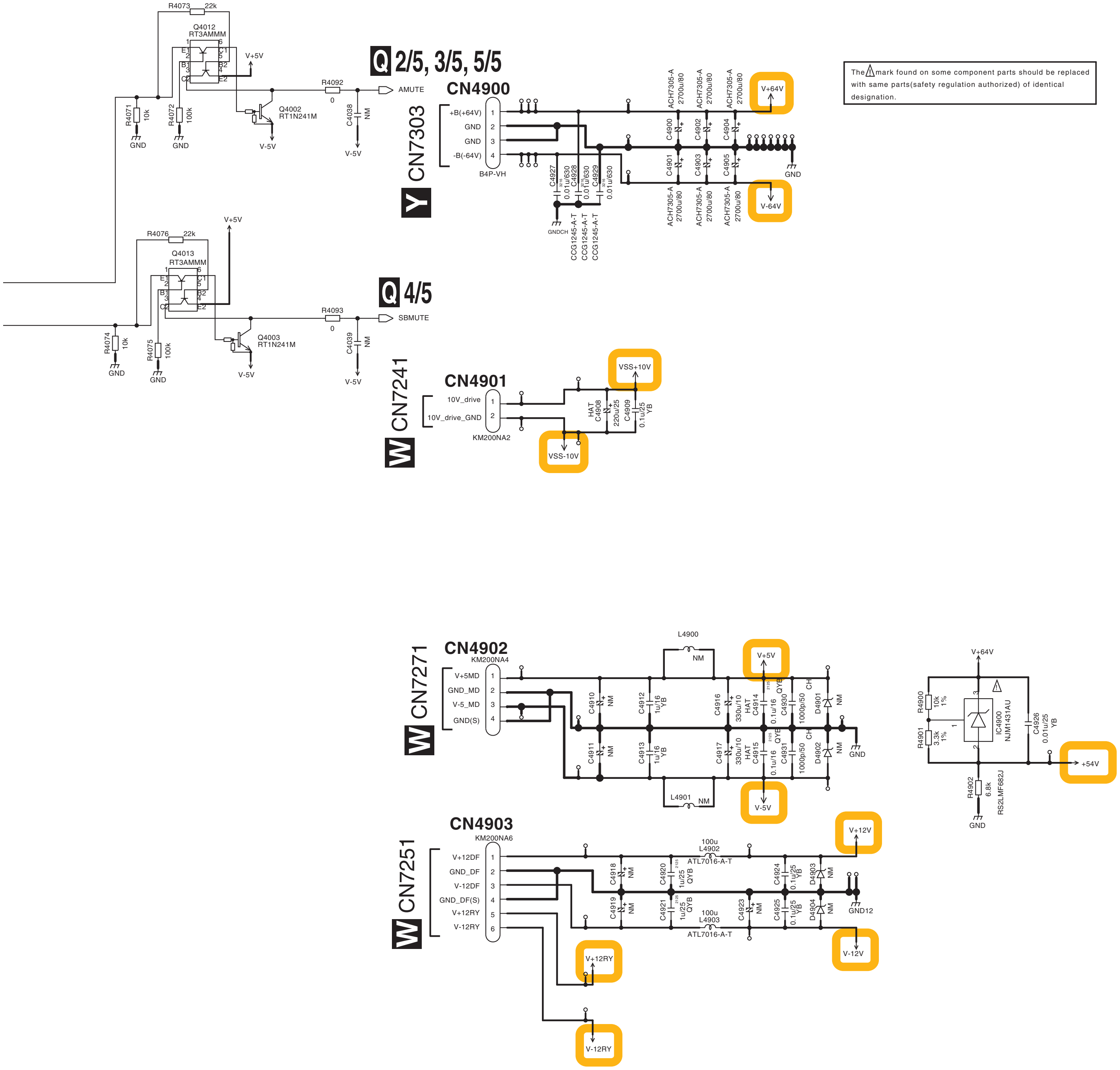


Q 2/5, 3/5, 4/5, 5/5
AMPOVERLOAD
Q4015
2SC4154(EFG)
V+5V
R4018
IC4004
TC74VHC08FTS1
D4007 1SS352
D4008 1SS352
D4009 1SS352
D4010 1SS352
R4080 3.3k
R4081 3.3k
R4082 3.3k
R4083 3.3k
R4084 12k
R4085 12k
R4086 12k
R4087 12k
C4031 0.1u/16 YB
C4032 0.1u/16 YB
C4033 0.1u/16 YB
C4034 0.1u/16 YB
IC4003
TC74VHC04FTS1
R4013 100
R4014 100
R4015 100
R4016 100
C4006 0.1u/16 YB
D4011 1SS352
D4012 1SS352
D4013 1SS352
D4014 1SS352
R4088 12k
R4089 12k
C4035 0.1u/16
R4091 47k
GND
R4017 0
C4005 0.1u/16 YB
R4001 100
R4002 100
R4003 100
R4004 100
R4005 8.2k
R4006 8.2k
R4007 8.2k
R4008 8.2k
AMPDISABLE1
AMPDISABLE2
AMPDISABLE3
AMPDISABLE4
Q 2/5
Q 3/5
Q 4/5
Q 5/5
C4001 1000p/25 CH
C4002 1000p/25 CH
C4003 1000p/25 CH
C4004 1000p/25 CH
R4098 0
IC4006 (2/2)
IC4006 (1/2)
TC7WH08FU
C4041 0.1u/16
R4028 100
R4030 100
R4029 100
R4031 100
C4018 1000p/25 CH
C4019 1000p/25 CH
AM CONTROL CIRCUIT
Q4001 2SA1602A(EF)
Q4000 RT1N241M
R4038 10k
R4039 22k
R4041 10k
R4042 27k
V-5V
OSC1
Q 2/5, 3/5, 4/5, 5/5
CN4000
CKS3382-A
Disable1 1
Disable2 2
Disable3 3
Disable4 4
AMUTE 5
SBMUTE 6
AMPTX1 7
AMP_Overload 8
RYA 9
RYC 10
RYS 11
RYB 12
Max_Temp 13
Thermal_Overload 14
DC_DETECT 15
GND 16
GND 17
GND1
R4036 100
R4037 100
C4020 1000p/25 CH
R4045 10k
R4043 100
R4044 100
C4021 1000p/25 CH
AMPOVERLOAD
Q 2/5, 3/5, 4/5, 5/5
R4046 100
R4047 100
R4048 100
R4049 100
R4050 100
R4051 100
R4052 100
R4053 100
C4014 1000p/25 CH
C4015 1000p/25 CH
C4016 1000p/25 CH
C4017 1000p/25 CH
Q 4/5
Q 3/5
Q 5/5
Q 2/5
RYB
RYS
RYC
RYA
Q4010 RT1P241M
Q4011 RT1N140M
Q4008 RT1P241M
Q4009 RT1N140M
Q4006 RT1P241M
Q4007 RT1N140M
Q4004 RT1P241M
Q4005 RT1N140M
DCdetRY
R4077 NM
F CN7051
D4001 1SS352
D4002 1SS352
D4003 1SS352
D4004 1SS352
R4009 220
R4010 220
R4011 220
R4012 220
R4021 100
IC4005
HA17431GLTPA
C4040 1u/10 YB
R4094 2.2k
R4059 2.2
OVER HEAT DETECT CIRCUIT
R4024 100
R4025 100
R4026 100
R4022 100
R4023 100
R4054 3.3k
R4096 0
R4056 470k
R4095 NM
IC4000 BU7262SFVM (2/2)
IC4000 (1/2) BU7262SFVM
R4058 68k
D4005 1SS352
R4060 56k 1%
R4061 33k 1%
C4022 1u/10
R4055 22k
R4097 0
C4026 0.1u/16 YB
C4013 1000p/25 CH
C4012 1000p/25 CH
C4011 1000p/25 CH
Q 2/5, 3/5, 4/5, 5/5
TEMP_OUT
C4023 10u/10 SYB
R4057 470 1/8W
C4024 100u/10 HAT
C4025 1u/10 YB
IC4001 (1/2) BU7262SFVM
R4063 2.2
R4062 3.3k
R4064 47k
C4027 0.1u/16 YB
DCdetRY
HN1C01FU(YGR)
Q4014
Q4016
DC_DETECT1
DC_DETECT2
C4010 330u/10 HAT
R4027 1.8k
C4036 330u/10 HAT
R4090 1.8k
C4037 NM
Q 2/5, 3/5, 4/5
Q 2/5, 3/5, 4/5, 5/5
R4065 NM
R4066 470k
D4006 NM
C4029 1u/10 YB
R4067 10k
R4068 10k
R4078 0
R4079 NM
IC4002 NM
C4030 NM
IC4001 (2/2) BU7262SFVM
R4069 47k
R4070 750k
C4028 0.01u/25 YB
DC DETECT CIRCUIT

Q 1/5

Q 1/5 ICEPOWER AMP ASSY (AWH7017)

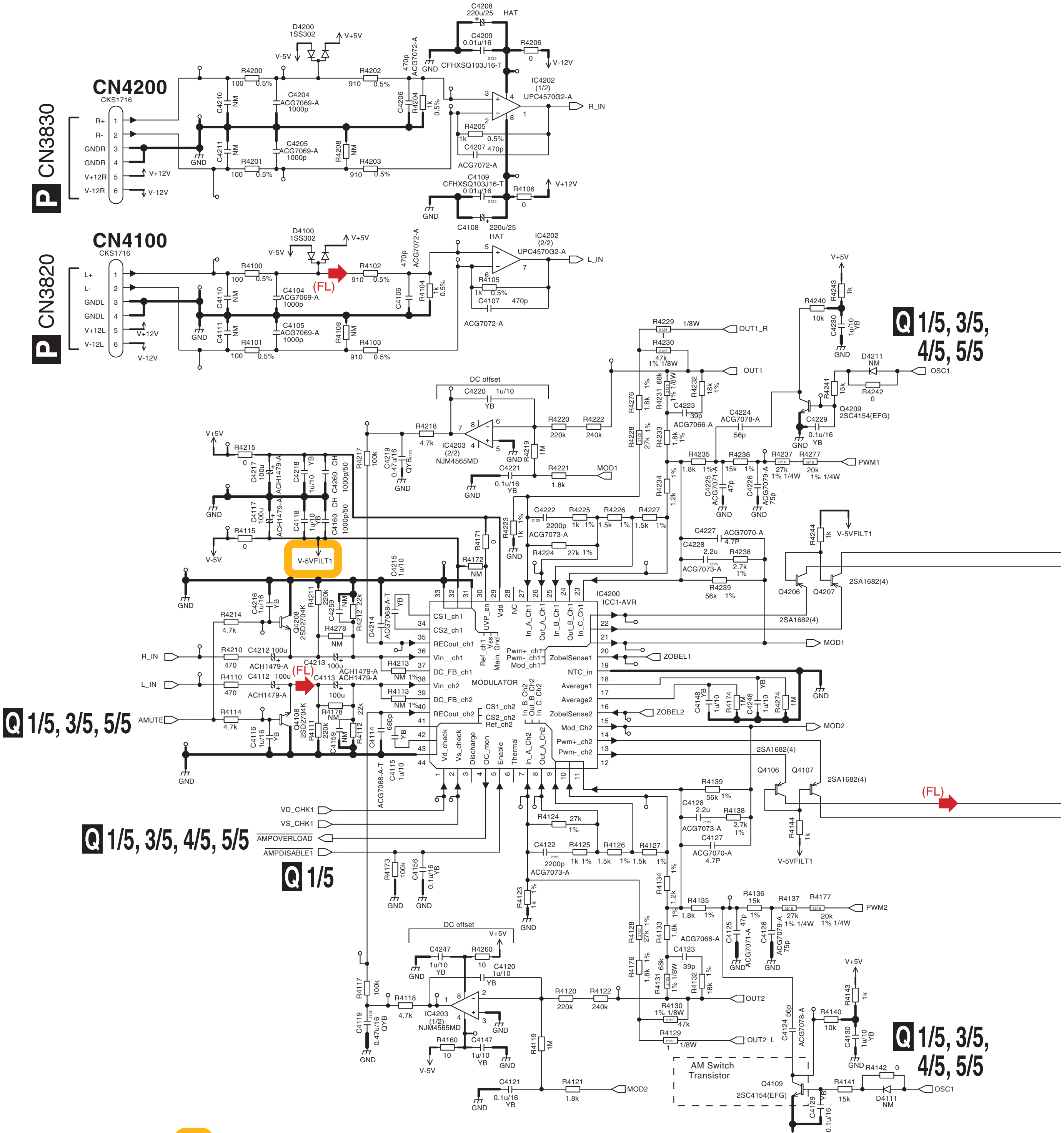
The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

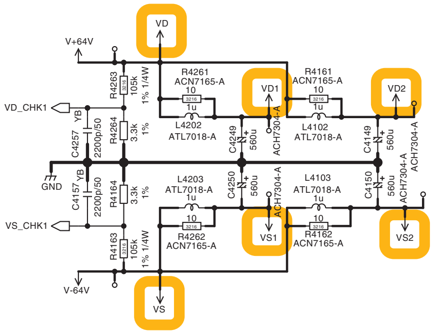

R4073 22k
Q4012
RT3AMMM
V+5V
R4092
0
AMUTE
Q4002
RT1N241M
R4071
10k
R4072
100k
GND
V-5V
C4038
NM
Q 2/5, 3/5, 5/5
CN4900
+B(+64V)
GND
GND
-B(-64V)
B4P-VH
Y CN7303
C4927
C4928
C4929
0.01u/630
CCG1245-A-T
GNDCH
C4900
C4902
C4904
C4901
C4903
C4905
ACH7305-A
2700u/80
V+64V
V-64V
GND
R4076 22k
Q4013
RT3AMMM
R4093
0
SBMUTE
Q4003
RT1N241M
R4074
10k
R4075
100k
C4039
NM
Q 4/5
CN4901
10V_drive
10V_drive_GND
KM200NA2
W CN7241
HAT
C4908
220u/25
C4909
0.1u/25
YB
VSS+10V
VSS-10V
L4900
NM
V+5V
CN4902
KM200NA4
V+5MD
GND_MD
V-5_MD
GND(S)
W CN7271
C4910
NM
C4912
1u/16
YB
C4916
330u/10
HAT
C4914
0.1u/16
QYB
C4930
1000p/50
CH
D4901
NM
C4911
C4913
C4917
C4915
C4931
D4902
GND
L4901
NM
V-5V
V+64V
R4900
10k
1%
R4901
3.3k
1%
IC4900
NJM1431AU
C4926
0.01u/25
YB
+54V
R4902
6.8k
RS2LMF682J
GND
CN4903
KM200NA6
V+12DF
GND_DF
V-12DF
GND_DF(S)
V+12RY
V-12RY
W CN7251
100u
L4902
ATL7016-A-T
V+12V
C4918
NM
C4920
1u/25
QYB
C4924
0.1u/25
YB
D4903
NM
C4919
NM
C4921
1u/25
QYB
L4903
ATL7016-A-T
C4923
NM
C4925
0.1u/25
YB
D4904
NM
GND12
V-12V
V+12RY
V-12RY
A
B
C
D
E
F

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCSRCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	2125 RS1/10S*** 2125 RS1/8SQ*** 1/8W	3216 RS1/8S*** 3216 RS1/4SA*** 1/4W
CCSR*** CKSR***	2125 CCSQ*** CKSQ***	3216 CCS*** CKS***

10.22 ICEPOWER AMP (2/5)


CN4200
CKS1716
P CN3830
R+
R-
GNDR
GNDR
V+12R
V-12R
CN4100
CKS1716
P CN3820
L+
L-
GNDL
GNDL
V+12L
V-12L
D4200 1SS302
D4100 1SS302
IC4202 (1/2) UPC4570G2-A
IC4202 (2/2) UPC4570G2-A
R_IN
L_IN
(FL)
V-5VFILT1
IC4203 (2/2) NJM4565MD
IC4203 (1/2) NJM4565MD
DC offset
IC4200 ICC1-AVR
MODULATOR
Q4208 2SD2704K
Q4108 2SD2704K
Q4206
Q4207
Q4106
Q4107
2SA1682(4)
Q4209 2SC4154(EFG)
Q4109 2SC4154(EFG)
AM Switch Transistor
OUT1_R
OUT1
OUT2
OUT2_L
OSC1
PWM1
PWM2
MOD1
MOD2
ZOBEL1
ZOBEL2
AMUTE
VD_CHK1
VS_CHK1
AMPOVERLOAD
AMPDISABLE1
Q 1/5, 3/5, 4/5, 5/5
Q 1/5, 3/5, 5/5
Q 1/5


VD
VD1
VD2
VS
VS1
VS2
V+64V
V-64V
VD_CHK1
VS_CHK1
R4261 ACN7165-A
R4161 ACN7165-A
R4262 ACN7165-A
R4162 ACN7165-A
L4202 ATL7018-A
L4102 ATL7018-A
L4203 ATL7018-A
L4103 ATL7018-A
C4249
C4149
C4250
C4150
ACH7304-A
R4263
R4264
R4164
R4163
C4257
C4157

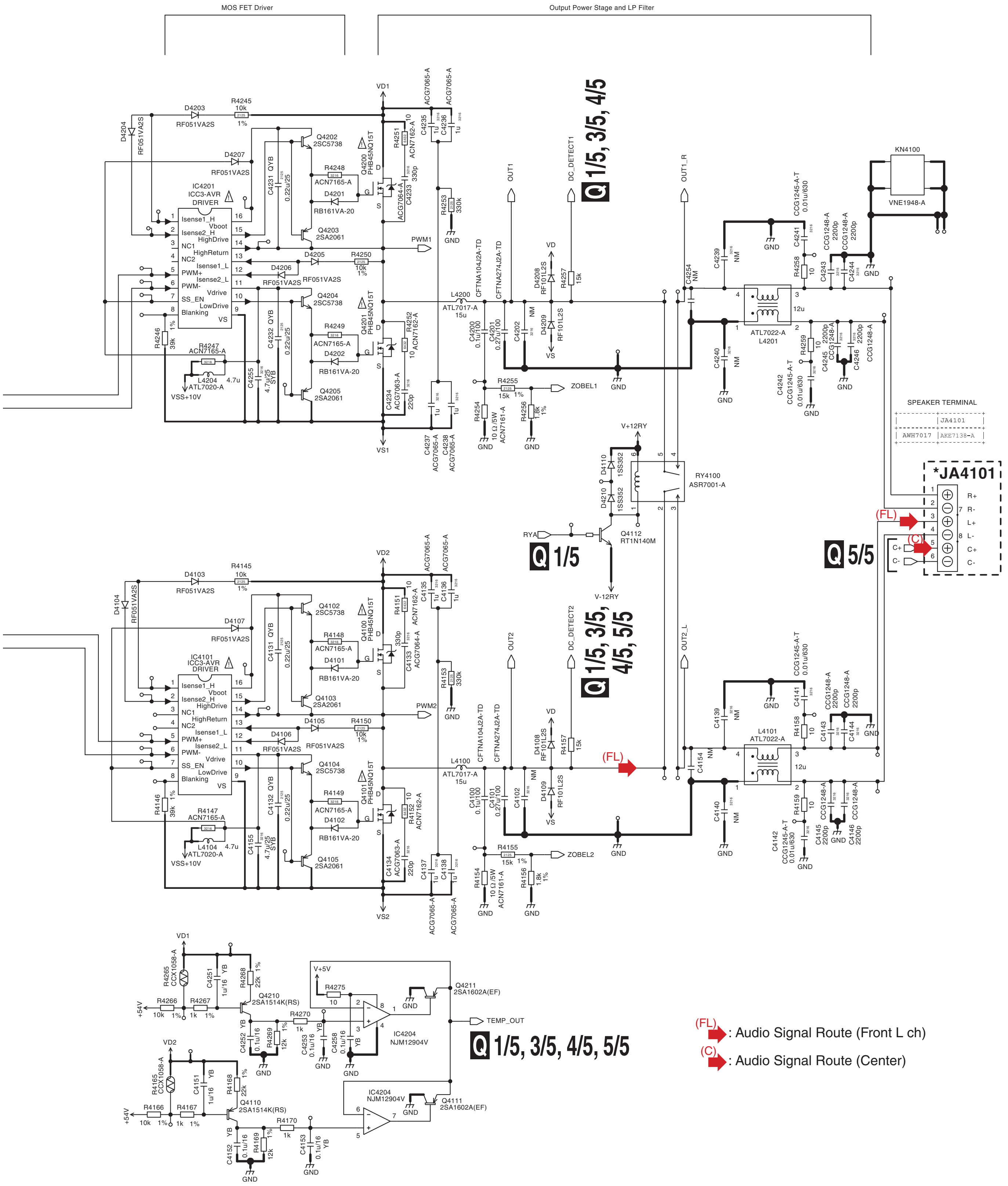
The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCSRCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

Q 2/5

Q 2/5 ICEPOWER AMP ASSY (AWH7017)

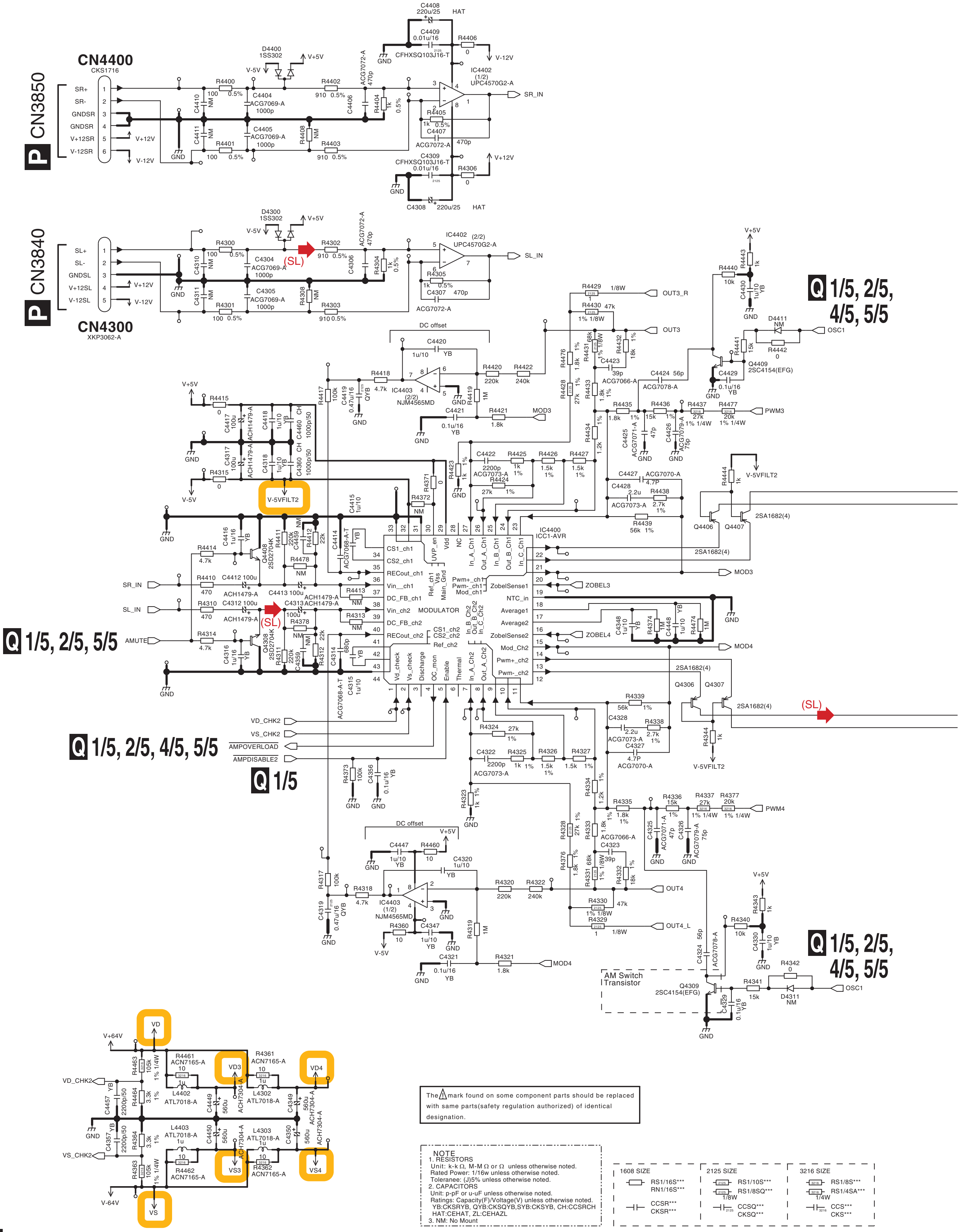

MOS FET Driver
Output Power Stage and LP Filter
IC4201
ICC3-AVR
DRIVER
Isense1_H
Isense2_H
NC1
NC2
PWM+
PWM-
SS_EN
Blanking
Vboot
HighDrive
HighReturn
Isense1_L
Isense2_L
Vdrive
LowDrive
VS
D4203 RF051VA2S
D4204 RF051VA2S
D4207 RF051VA2S
R4245 10k 1%
Q4202 2SC5738
Q4203 2SA2061
Q4204 2SC5738
Q4205 2SA2061
Q4200 PHB45NQ15T
Q4201 PHB45NQ15T
R4248 ACN7165-A
R4249 ACN7165-A
D4201 RB161VA-20
D4202 RB161VA-20
D4205
D4206 RF051VA2S
R4250 10k 1%
R4246 39k 1%
R4247 ACN7165-A
L4204 ATL7020-A 4.7u
VSS+10V
C4231 QYB 0.22u/25
C4232 QYB 0.22u/25
C4255 4.7u/25 SYB
R4251 10 ACN7162-A
R4252 10 ACN7162-A
C4233 ACG7064-A 330p
C4234 ACG7063-A 220p
C4235 1u ACG7065-A
C4236 1u ACG7065-A
C4237 1u ACG7065-A
C4238 1u ACG7065-A
R4253 330k
VD1
VS1
PWM1
GND
L4200 ATL7017-A 15u
C4200 CFTNA104J2A-TD 0.1u/100
C4201 CFTNA274J2A-TD 0.27u/100
C4202 NM
D4208 RF101L2S
D4209 RF101L2S
VD
VS
R4257 15k
R4255 15k 1%
R4254 10 Ω/5W ACN7161-A
R4256 1.8k 1%
ZOBEL1
OUT1
DC_DETECT1
OUT1_R
Q 1/5, 3/5, 4/5
C4254 NM
C4239 NM
C4240 NM
C4241 CCG1245-A-T 0.01u/630
C4242 CCG1245-A-T 0.01u/630
R4258 10
R4259 10
C4243 CCG1248-A 2200p
C4244 CCG1248-A 2200p
C4245 CCG1248-A 2200p
C4246 CCG1248-A 2200p
L4201 ATL7022-A 12u
KN4100
VNE1948-A
SPEAKER TERMINAL
JA4101
AWH7017
AKE7138-A
*JA4101
R+
R-
L+
L-
C+
C-
(FL)
(C)
Q 5/5
V+12RY
V-12RY
D4110 1SS352
D4210 1SS352
RY4100 ASR7001-A
RYA
Q4112 RT1N140M
Q 1/5
VD2
VS2
IC4101
ICC3-AVR
DRIVER
D4103 RF051VA2S
D4104 RF051VA2S
D4107 RF051VA2S
R4145 10k 1%
Q4102 2SC5738
Q4103 2SA2061
Q4104 2SC5738
Q4105 2SA2061
Q4100 PHB45NQ15T
Q4101 PHB45NQ15T
R4148 ACN7165-A
R4149 ACN7165-A
D4101 RB161VA-20
D4102 RB161VA-20
D4105
D4106 RF051VA2S
R4150 10k 1%
R4146 39k 1%
R4147 ACN7165-A
L4104 ATL7020-A 4.7u
C4131 QYB 0.22u/25
C4132 QYB 0.22u/25
C4155 4.7u/25 SYB
R4151 10 ACN7162-A
R4152 10 ACN7162-A
C4133 ACG7064-A 330p
C4134 ACG7063-A 220p
C4135 1u ACG7065-A
C4136 1u ACG7065-A
C4137 1u ACG7065-A
C4138 1u ACG7065-A
R4153 330k
PWM2
L4100 ATL7017-A 15u
C4100 CFTNA104J2A-TD 0.1u/100
C4101 CFTNA274J2A-TD 0.27u/100
C4102 NM
D4108 RF101L2S
D4109 RF101L2S
R4157 15k
R4155 15k 1%
R4154 10 Ω/5W ACN7161-A
R4156 1.8k 1%
ZOBEL2
OUT2
DC_DETECT2
OUT2_L
Q 1/5, 3/5, 4/5, 5/5
C4154 NM
C4139 NM
C4140 NM
C4141 CCG1245-A-T 0.01u/630
C4142 CCG1245-A-T 0.01u/630
R4158 10
R4159 10
C4143 CCG1248-A 2200p
C4144 CCG1248-A 2200p
C4145 2200p
C4146 2200p
L4101 ATL7022-A 12u
+54V
R4265 CCX1058-A
R4266 10k 1%
R4267 1k 1%
C4251 1u/16 YB
R4268 22k 1%
Q4210 2SA1514K(RS)
C4252 0.1u/16 YB
R4269 12k 1%
R4270 1k
C4253 0.1u/16 YB
C4258 0.1u/16 YB
V+5V
R4275 10
IC4204 NJM12904V
Q4211 2SA1602A(EF)
TEMP_OUT
R4165 CCX1058-A
R4166 10k 1%
R4167 1k 1%
C4151 1u/16 YB
R4168 22k 1%
Q4110 2SA1514K(RS)
C4152 0.1u/16 YB
R4169 12k 1%
R4170 1k
C4153 0.1u/16 YB
Q4111 2SA1602A(EF)
Q 1/5, 3/5, 4/5, 5/5

(FL) : Audio Signal Route (Front L ch)

(C) : Audio Signal Route (Center)

Q 2/5

10.23 ICEPOWER AMP (3/5)

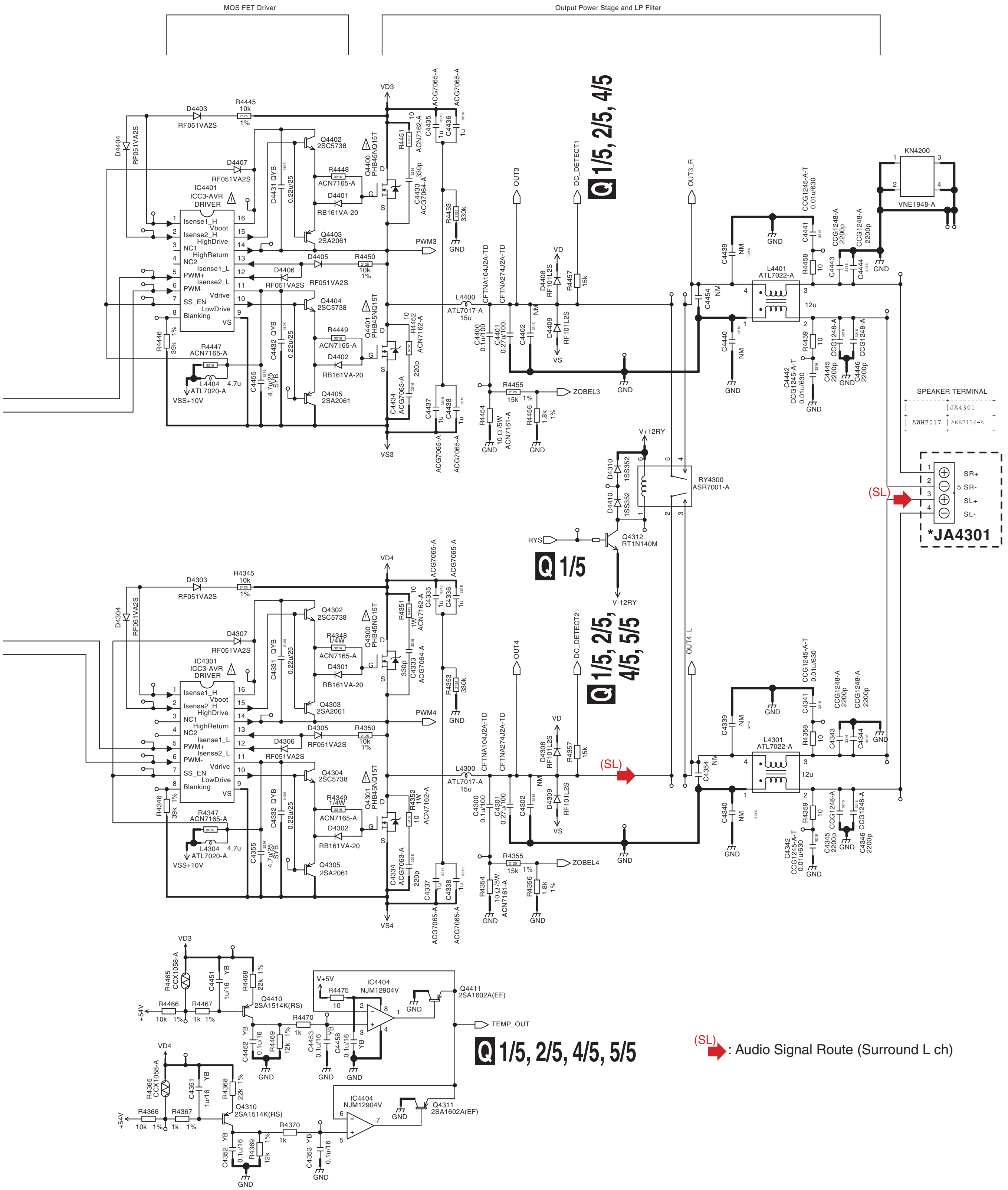

1
2
3
4
A
B
C
D
E
F
CN4400
CKS1716
P CN3850
SR+
SR-
GNDSR
GNDSR
V+12SR
V-12SR
V+12V
V-12V
GND
D4400
1SS302
V-5V
V+5V
R4400
100 0.5%
C4404
ACG7069-A
1000p
C4405
ACG7069-A
1000p
R4401
100 0.5%
C4410 NM
C4411 NM
R4408 NM
R4402
910 0.5%
R4403
910 0.5%
C4406
ACG7072-A
470p
R4404
1k 0.5%
C4408
220u/25 HAT
C4409
0.01u/16
CFHXSQ103J16-T
R4406
0
V-12V
IC4402
(1/2)
UPC4570G2-A
SR_IN
R4405
1k 0.5%
C4407
ACG7072-A
470p
C4309
CFHXSQ103J16-T
0.01u/16
R4306
0
V+12V
C4308 220u/25 HAT
P CN3840
CN4300
XKP3062-A
SL+
SL-
GNDSL
V+12SL
V-12SL
D4300
1SS302
R4300
100 0.5%
C4304
ACG7069-A
1000p
C4305
ACG7069-A
1000p
(SL)
R4301
100 0.5%
R4302
910 0.5%
R4303
910 0.5%
C4306
ACG7072-A
470p
R4304
1k 0.5%
IC4402 (2/2)
UPC4570G2-A
SL_IN
R4305
1k 0.5%
C4307 470p
ACG7072-A
DC offset
C4420
1u/10 YB
R4418
4.7k
IC4403
(2/2)
NJM4565MD
R4417
100k
C4419
0.47u/16 QYB
R4419
1M
R4420
220k
R4422
240k
C4421
0.1u/16 YB
R4421
1.8k
MOD3
R4429
1/8W
OUT3_R
R4430 47k
1% 1/8W
OUT3
R4476
R4431 68k
C4423
39p
ACG7066-A
R4432 18k
R4428 27k
R4433 1.8k
R4434 1.2k
C4424 56p
ACG7078-A
R4435 1.8k
R4436 15k
R4437 27k 1% 1/4W
R4477 20k 1% 1/4W
PWM3
C4425 ACG7071-A 47p
C4426 ACG7079-A 75p
V+5V
R4443 1k
R4440 10k
C4430 1u/10 YB
D4411 NM
OSC1
R4441 15k
R4442 0
Q4409
2SC4154(EFG)
C4429
0.1u/16 YB
Q 1/5, 2/5, 4/5, 5/5
V+5V
R4415 0
C4417 100u ACH1479-A
C4418 1u/10 YB
C4460 CH 1000p/50
C4317 100u ACH1479-A
C4318 1u/10 YB
C4360 CH 1000p/50
R4315 0
V-5V
V-5VFILT2
C4415 1u/10
R4371 0
R4372 NM
R4423 1k
C4422 2200p
ACG7073-A
R4425 1k 1%
R4426 1.5k 1%
R4427 1.5k 1%
R4424 27k 1%
C4427 ACG7070-A 4.7P
C4428 2.2u
ACG7073-A
R4438 2.7k 1%
R4439 56k 1%
R4444 1k
V-5VFILT2
Q4406
Q4407
2SA1682(4)
IC4400
ICC1-AVR
C4416 1u/16 YB
Q4408 2SD2704K
R4411 220k
C4459 NM
R4412 22k
R4414 4.7k
R4478 NM
C4414 ACG7068-A-T
SR_IN
R4410 470
C4412 100u ACH1479-A
C4413 100u ACH1479-A
R4413 NM
SL_IN
R4310 470
C4312 100u ACH1479-A
C4313 100u ACH1479-A
R4313 NM
R4378 NM
AMUTE
R4314 4.7k
C4316 1u/16 YB
Q4308 2SD2704K
R4311 220k
C4359 NM
R4312 22k
C4314 680p
C4315 1u/10
ACG7068-A-T
CS1_ch1
CS2_ch1
RECout_ch1
Vin__ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
MODULATOR
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Ref_ch1
Vss
Main_Gnd
Pwm+_ch1
Pwm-_ch1
Mod_ch1
ZobelSense1
NTC_in
Average1
Average2
ZobelSense2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
CS1_ch2
CS2_ch2
Ref_ch2
In_B_Ch2
Out_B_Ch2
In_C_Ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
MOD3
ZOBEL3
ZOBEL4
MOD4
C4348 1u/10 YB
R4374 1M
C4448 1u/10 YB
R4474 1M
2SA1682(4)
Q4306
Q4307
(SL)
R4339 56k 1%
C4328 2.2u
ACG7073-A
R4338 2.7k 1%
C4327 4.7P
ACG7070-A
R4344 1k
V-5VFILT2
R4324 27k 1%
C4322 2200p
ACG7073-A
R4325 1k 1%
R4326 1.5k 1%
R4327 1.5k 1%
VD_CHK2
VS_CHK2
AMPOVERLOAD
AMPDISABLE2
Q 1/5, 2/5, 4/5, 5/5
Q 1/5, 2/5, 5/5
Q 1/5
R4373 100k
C4356 0.1u/16 YB
R4323 1k 1%
R4334 1.2k
R4335 1.8k 1%
R4336 15k
R4337 27k 1% 1/4W
R4377 20k 1% 1/4W
PWM4
C4325 ACG7071-A 47p
C4326 ACG7079-A 75p
DC offset
V+5V
C4447 1u/10 YB
R4460 10
C4320 1u/10 YB
R4318 4.7k
IC4403
(1/2)
NJM4565MD
R4317 100k
C4319 0.47u/16 QYB
R4360 10
C4347 1u/10 YB
V-5V
R4319 1M
R4320 220k
R4322 240k
C4321 0.1u/16 YB
R4321 1.8k
MOD4
R4328 27k
R4376 1.8k
R4333 1.8k
R4331 68k 1% 1/8W
C4323 39p
ACG7066-A
R4332 18k
R4330 47k 1% 1/8W
OUT4
R4329 1/8W
OUT4_L
C4324 56p ACG7078-A
V+5V
R4343 1k
R4340 10k
C4330 1u/10 YB
R4342 0
R4341 15k
D4311 NM
OSC1
AM Switch Transistor
Q4309
2SC4154(EFG)
C4329 0.1u/16 YB
Q 1/5, 2/5, 4/5, 5/5
VD
V+64V
R4463 105k 1% 1/4W
R4461 ACN7165-A 10
L4402 ATL7018-A 1u
VD3
C4449 560u ACH7304-A
R4361 ACN7165-A 10
L4302 ATL7018-A 1u
VD4
C4349 560u ACH7304-A
VD_CHK2
C4457 YB 2200p/50
R4464 3.3k 1%
C4357 YB 2200p/50
R4364 3.3k 1%
VS_CHK2
L4403 ATL7018-A 1u
C4450 560u ACH7304-A
L4303 ATL7018-A 1u
C4350 560u ACH7304-A
R4363 105k 1% 1/4W
R4462 10 ACN7165-A
VS3
R4362 10 ACN7165-A
VS4
V-64V
VS

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCSRCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount

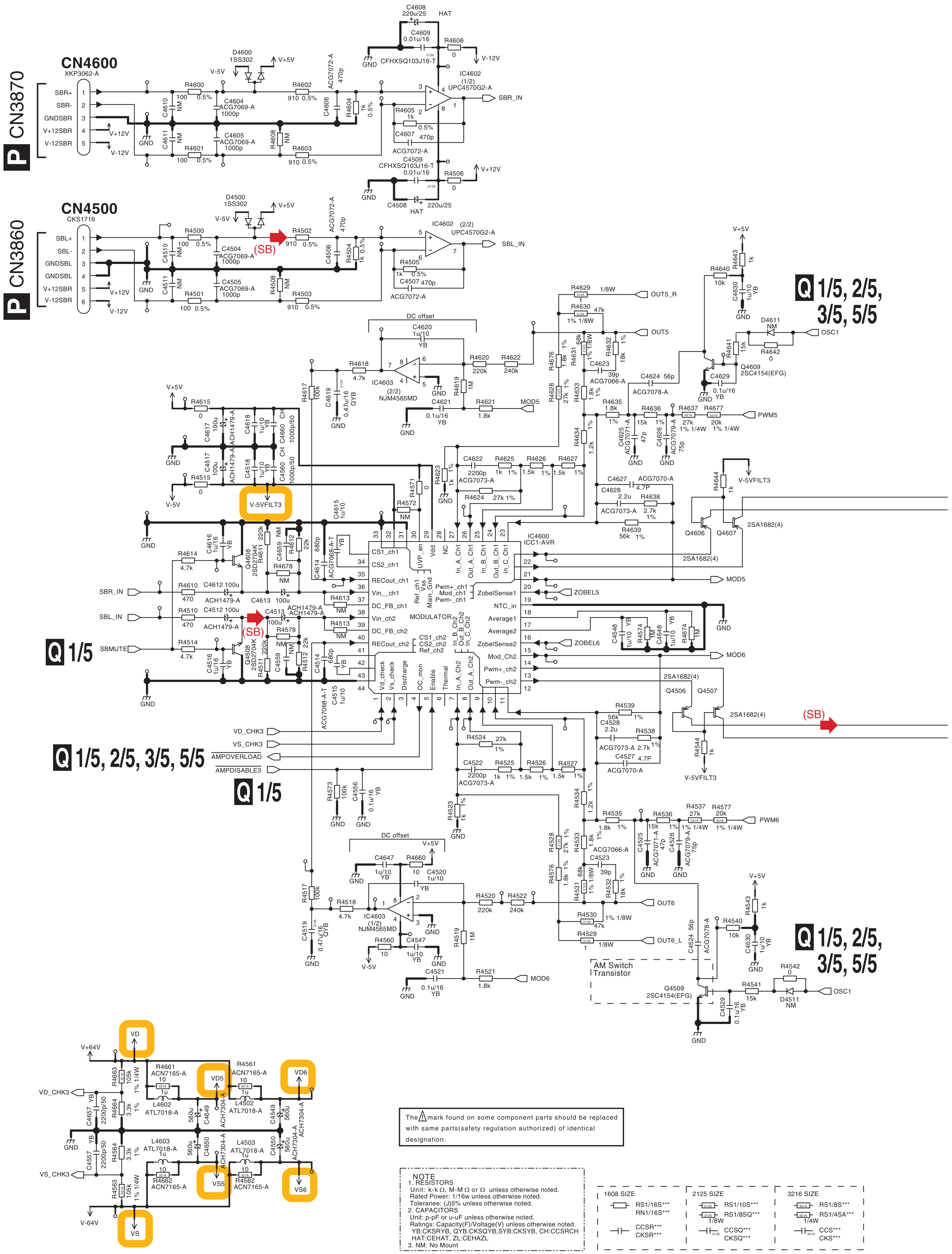
1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

Q 3/5 ICEPOWER AMP ASSY (AWH7017)


MOS FET Driver
Output Power Stage and LP Filter
VD3
D4403
RF051VA2S
R4445
10k
1%
D4404
RF051VA2S
D4407
RF051VA2S
IC4401
ICC3-AVR
DRIVER
Isense1_H
Vboot
Isense2_H
HighDrive
NC1
HighReturn
NC2
Isense1_L
PWM+
Isense2_L
PWM-
Vdrive
SS_EN
LowDrive
Blanking
VS
R4446
39k 1%
R4447
ACN7165-A
L4404
ATL7020-A
4.7u
VSS+10V
C4431 QYB 0.22u/25
C4432 QYB 0.22u/25
C4455 4.7u/25 SYB
Q4402
2SC5738
Q4403
2SA2061
Q4404
2SC5738
Q4405
2SA2061
R4448
ACN7165-A
D4401
RB161VA-20
D4405
D4406
RF051VA2S
R4449
ACN7165-A
D4402
RB161VA-20
R4450
10k 1%
Q4400
PHB45NQ15T
Q4401
PHB45NQ15T
R4451
10
ACN7162-A
R4452
10
ACN7162-A
C4433
330p
ACG7064-A
C4434
ACG7063-A
220p
C4435
1u
C4436
1u
ACG7065-A
C4437
1u
C4438
1u
R4453
330k
GND
PWM3
VS3
L4400
ATL7017-A
15u
CFTNA104J2A-TD
CFTNA274J2A-TD
C4400
0.1u/100
C4401
0.27u/100
C4402
NM
OUT3
DC_DETECT1
VD
D4408
RF101L2S
D4409
RF101L2S
R4457
15k
VS
R4454
10 Ω/5W
ACN7161-A
R4455
15k 1%
R4456
1.8k 1%
ZOBEL3
GND
Q 1/5, 2/5, 4/5
OUT3_R
C4439
NM
C4440
NM
C4454
NM
L4401
ATL7022-A
12u
C4441
CCG1245-A-T
0.01u/630
C4442
CCG1245-A-T
0.01u/630
R4458
10
R4459
10
C4443
CCG1248-A
2200p
C4444
CCG1248-A
2200p
C4445
2200p
CCG1248-A
C4446
2200p
CCG1248-A
KN4200
VNE1948-A
SPEAKER TERMINAL
JA4301
AWH7017
AKE7136-A
SR+
SR-
SL+
SL-
*JA4301
(SL)
V+12RY
D4310
1SS352
D4410
1SS352
RY4300
ASR7001-A
RYS
Q4312
RT1N140M
Q 1/5
V-12RY
VD4
D4303
RF051VA2S
R4345
10k 1%
D4304
RF051VA2S
D4307
RF051VA2S
IC4301
ICC3-AVR
DRIVER
R4346
39k 1%
R4347
ACN7165-A
L4304
ATL7020-A
4.7u
VSS+10V
C4331 QYB 0.22u/25
C4332 QYB 0.22u/25
C4355 4.7u/25 SYB
Q4302
2SC5738
Q4303
2SA2061
Q4304
2SC5738
Q4305
2SA2061
R4348
1/4W
ACN7165-A
D4301
RB161VA-20
D4305
D4306
RF051VA2S
R4349
1/4W
ACN7165-A
D4302
RB161VA-20
R4350
10k 1%
Q4300
PHB45NQ15T
Q4301
PHB45NQ15T
R4351
10 1W
ACN7162-A
R4352
10 1W
ACN7162-A
C4333
330p
ACG7064-A
C4334
ACG7063-A
220p
C4335
1u
C4336
1u
C4337
1u
C4338
1u
R4353
330k
PWM4
VS4
L4300
ATL7017-A
15u
C4300
0.1u/100
C4301
0.27u/100
C4302
NM
OUT4
DC_DETECT2
D4308
RF101L2S
D4309
RF101L2S
R4357
15k
R4354
10 Ω/5W
ACN7161-A
R4355
15k 1%
R4356
1.8k 1%
ZOBEL4
Q 1/5, 2/5, 4/5, 5/5
OUT4_L
C4339
NM
C4340
NM
C4354
NM
L4301
ATL7022-A
12u
C4341
CCG1245-A-T
0.01u/630
C4342
CCG1245-A-T
0.01u/630
R4358
10
R4359
10
C4343
C4344
C4345
2200p
CCG1248-A
C4346
2200p
CCG1248-A
R4465
CCX1058-A
C4451
1u/16 YB
R4468
22k 1%
+54V
R4466
10k 1%
R4467
1k 1%
Q4410
2SA1514K(RS)
C4452 YB 0.1u/16
R4469
12k 1%
R4470
1k
V+5V
IC4404
NJM12904V
R4475
10
C4453 YB 0.1u/16
C4458 YB 0.1u/16
Q4411
2SA1602A(EF)
TEMP_OUT
R4365
CCX1058-A
C4351
1u/16 YB
R4368
22k 1%
R4366
10k 1%
R4367
1k 1%
Q4310
2SA1514K(RS)
C4352 YB 0.1u/16
R4369
12k 1%
R4370
1k
C4353 YB 0.1u/16
IC4404
NJM12904V
Q4311
2SA1602A(EF)
Q 1/5, 2/5, 4/5, 5/5

(SL): Audio Signal Route (Surround L ch)

10.24 ICEPOWER AMP (4/5)


A
B
C
D
E
F
P CN3870
CN4600
XKP3062-A
SBR+
SBR-
GNDSBR
V+12SBR
V-12SBR
P CN3860
CN4500
CKS1716
SBL+
SBL-
GNDSBL
V+12SBR
V-12SBR
D4600
1SS302
D4500
1SS302
V+5V
V-5V
C4608
220u/25
HAT
C4609
0.01u/16
CFHXSQ103J16-T
R4606
0
V-12V
V+12V
IC4602
(1/2)
UPC4570G2-A
IC4602 (2/2)
UPC4570G2-A
SBR_IN
SBL_IN
C4509
CFHXSQ103J16-T
0.01u/16
C4508
220u/25
HAT
R4506
0
(SB)
ACG7072-A
ACG7069-A
DC offset
C4620
1u/10
YB
IC4603
(2/2)
NJM4565MD
IC4603
(1/2)
NJM4565MD
OUT5_R
OUT5
OUT6
OUT6_L
OSC1
PWM5
PWM6
MOD5
MOD6
ZOBEL5
ZOBEL6
Q4609
2SC4154(EFG)
Q4509
2SC4154(EFG)
D4611
NM
D4511
NM
V-5VFILT3
Q4606
Q4607
Q4506
Q4507
2SA1682(4)
IC4600
ICC1-AVR
Q4608
2SD2704K
Q4508
2SD2704K
CS1_ch1
CS2_ch1
RECout_ch1
Vin__ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Ref_ch1
Vss
Main_Gnd
Pwm+_ch1
Mod_ch1
Pwm-_ch1
ZobelSense1
NTC_in
MODULATOR
Average1
Average2
ZobelSense2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
CS1_ch2
CS2_ch2
Ref_ch2
In_B_Ch2
Out_B_Ch2
In_A_Ch2
Out_A_Ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
SBMUTE
VD_CHK3
VS_CHK3
AMPOVERLOAD
AMPDISABLE3
AM Switch
Transistor
Q 1/5, 2/5, 3/5, 5/5
Q 1/5
Q 1/5, 2/5, 3/5, 5/5
Q 1/5
Q 1/5, 2/5, 3/5, 5/5
VD
VS
VD5
VS5
VD6
VS6
V+64V
V-64V
R4661
ACN7165-A
R4561
ACN7165-A
R4662
ACN7165-A
R4562
ACN7165-A
L4602
ATL7018-A
L4502
ATL7018-A
L4603
ATL7018-A
L4503
ATL7018-A
C4649
C4549
C4650
C4550
ACH7304-A
560u
R4663
105k
R4664
3.3k
R4563
105k
R4564
3.3k
C4657
C4557
2200p/50
GND

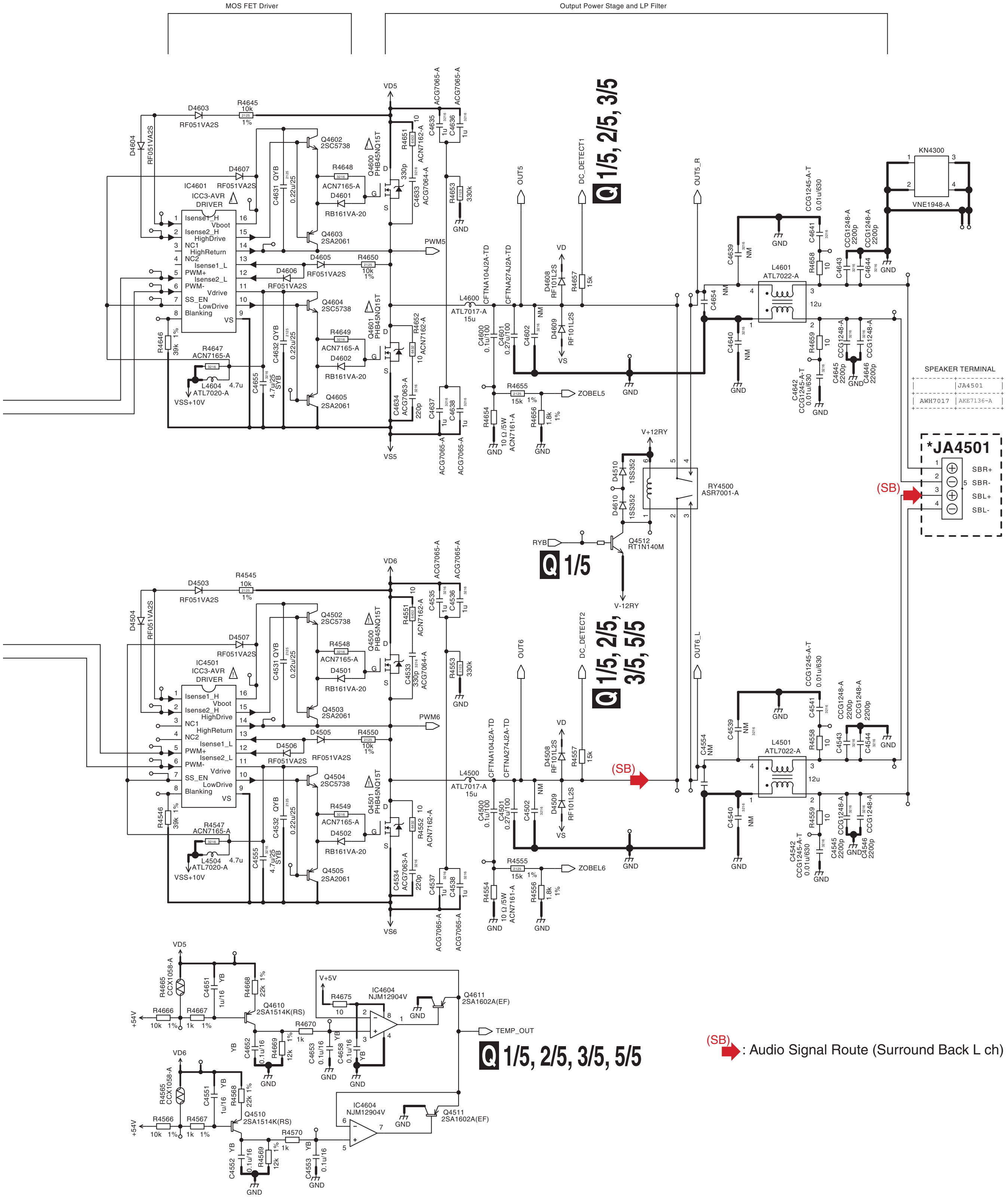
The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCSRCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount

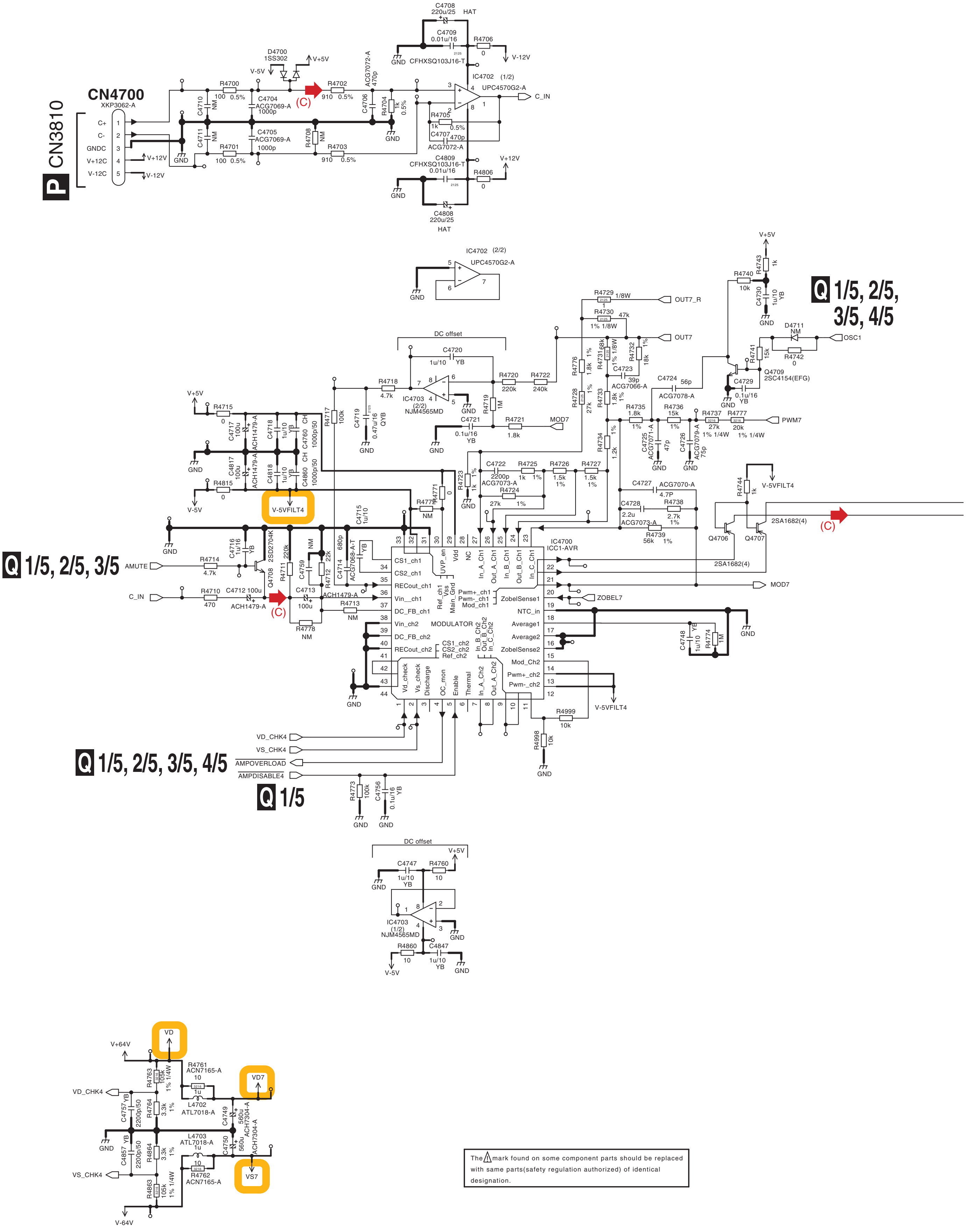
1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

Q 4/5

Q 4/5 ICEPOWER AMP ASSY (AWH7017)


MOS FET Driver
Output Power Stage and LP Filter
VD5
D4603
RF051VA2S
R4645
10k
1%
D4604
RF051VA2S
D4607
IC4601 RF051VA2S
ICC3-AVR
DRIVER
1 Isense1_H
Vboot
2 Isense2_H
HighDrive
3 NC1
HighReturn
4 NC2
Isense1_L
5 PWM+
Isense2_L
6 PWM-
Vdrive
7 SS_EN
LowDrive
8 Blanking
VS
16
15
14
13
12
11
10
9
R4646
39k
1%
R4647
ACN7165-A
L4604
4.7u
ATL7020-A
VSS+10V
C4631 OYB
0.22u/25
C4632 OYB
0.22u/25
C4655
4.7u/25
SYB
Q4602
2SC5738
R4648
ACN7165-A
D4601
RB161VA-20
Q4603
2SA2061
D4605
D4606
RF051VA2S
R4650
10k
1%
PWM5
Q4604
2SC5738
R4649
ACN7165-A
D4602
RB161VA-20
Q4605
2SA2061
Q4600
PHB45NQ15T
Q4601
PHB45NQ15T
R4651
10
ACN7162-A
330p
C4633
ACG7064-A
R4652
10
ACN7162-A
C4634
ACG7063-A
220p
C4635
1u
C4636
1u
ACG7065-A
ACG7065-A
R4653
330k
GND
C4637
1u
C4638
1u
ACG7065-A
ACG7065-A
VS5
L4600
ATL7017-A
15u
CFTNA104J2A-TD
CFTNA274J2A-TD
C4600
0.1u/100
C4601
0.27u/100
C4602
NM
OUT5
DC_DETECT1
VD
D4608
RF101L2S
R4657
15k
D4609
RF101L2S
VS
R4655
15k
1%
ZOBEL5
R4654
10 Ω/5W
ACN7161-A
R4656
1.8k
1%
GND
GND
GND
Q 1/5, 2/5, 3/5
OUT5_R
C4639
NM
C4654
NM
C4640
NM
GND
L4601
ATL7022-A
12u
R4658
10
R4659
10
C4641
CCG1245-A-T
0.01u/630
C4642
CCG1245-A-T
0.01u/630
C4643
C4644
CCG1248-A
2200p
CCG1248-A
2200p
C4645
2200p
C4646
2200p
CCG1248-A
CCG1248-A
GND
KN4300
VNE1948-A
SPEAKER TERMINAL
JA4501
AWH7017
AKE7136-A
*JA4501
SBR+
SBR-
SBL+
SBL-
(SB)
V+12RY
D4510
1SS352
D4610
1SS352
RY4500
ASR7001-A
RYB
Q4512
RT1N140M
Q 1/5
V-12RY
VD6
D4503
RF051VA2S
R4545
10k
1%
D4504
RF051VA2S
D4507
RF051VA2S
IC4501
ICC3-AVR
DRIVER
R4546
39k
1%
R4547
ACN7165-A
L4504
4.7u
ATL7020-A
VSS+10V
C4531 OYB
0.22u/25
C4532 OYB
0.22u/25
C4555
4.7u/25
SYB
Q4502
2SC5738
R4548
ACN7165-A
D4501
RB161VA-20
Q4503
2SA2061
D4505
D4506
RF051VA2S
R4550
10k
1%
PWM6
Q4504
2SC5738
R4549
ACN7165-A
D4502
RB161VA-20
Q4505
2SA2061
Q4500
PHB45NQ15T
Q4501
PHB45NQ15T
R4551
10
ACN7162-A
C4533
330p
ACG7064-A
R4552
10
ACN7162-A
C4534
ACG7063-A
220p
C4535
1u
C4536
1u
R4553
330k
GND
C4537
1u
C4538
1u
ACG7065-A
VS6
L4500
ATL7017-A
15u
CFTNA104J2A-TD
CFTNA274J2A-TD
C4500
0.1u/100
C4501
0.27u/100
C4502
NM
OUT6
DC_DETECT2
D4508
RF101L2S
R4557
15k
D4509
RF101L2S
R4555
15k
1%
ZOBEL6
R4554
10 Ω/5W
ACN7161-A
R4556
1.8k
1%
Q 1/5, 2/5, 3/5, 5/5
(SB)
OUT6_L
C4539
NM
C4554
NM
C4540
NM
L4501
ATL7022-A
12u
R4558
10
R4559
10
C4541
CCG1245-A-T
0.01u/630
C4542
CCG1245-A-T
0.01u/630
C4543
C4544
CCG1248-A
2200p
C4545
2200p
C4546
2200p
VD5
R4665
CCX1058-A
C4651
1u/16
YB
R4668
22k
1%
+54V
R4666
10k 1%
R4667
1k 1%
Q4610
2SA1514K(RS)
R4670
1k
C4652
0.1u/16
YB
R4669
12k
1%
C4653
0.1u/16
C4658
0.1u/16
YB
V+5V
R4675
10
IC4604
NJM12904V
Q4611
2SA1602A(EF)
TEMP_OUT
VD6
R4565
CCX1058-A
C4551
1u/16
YB
R4568
22k
1%
R4566
10k 1%
R4567
1k 1%
Q4510
2SA1514K(RS)
R4570
1k
C4552
0.1u/16
R4569
12k
1%
C4553
0.1u/16
IC4604
NJM12904V
Q4511
2SA1602A(EF)
GND
Q 1/5, 2/5, 3/5, 5/5
(SB): Audio Signal Route (Surround Back L ch)

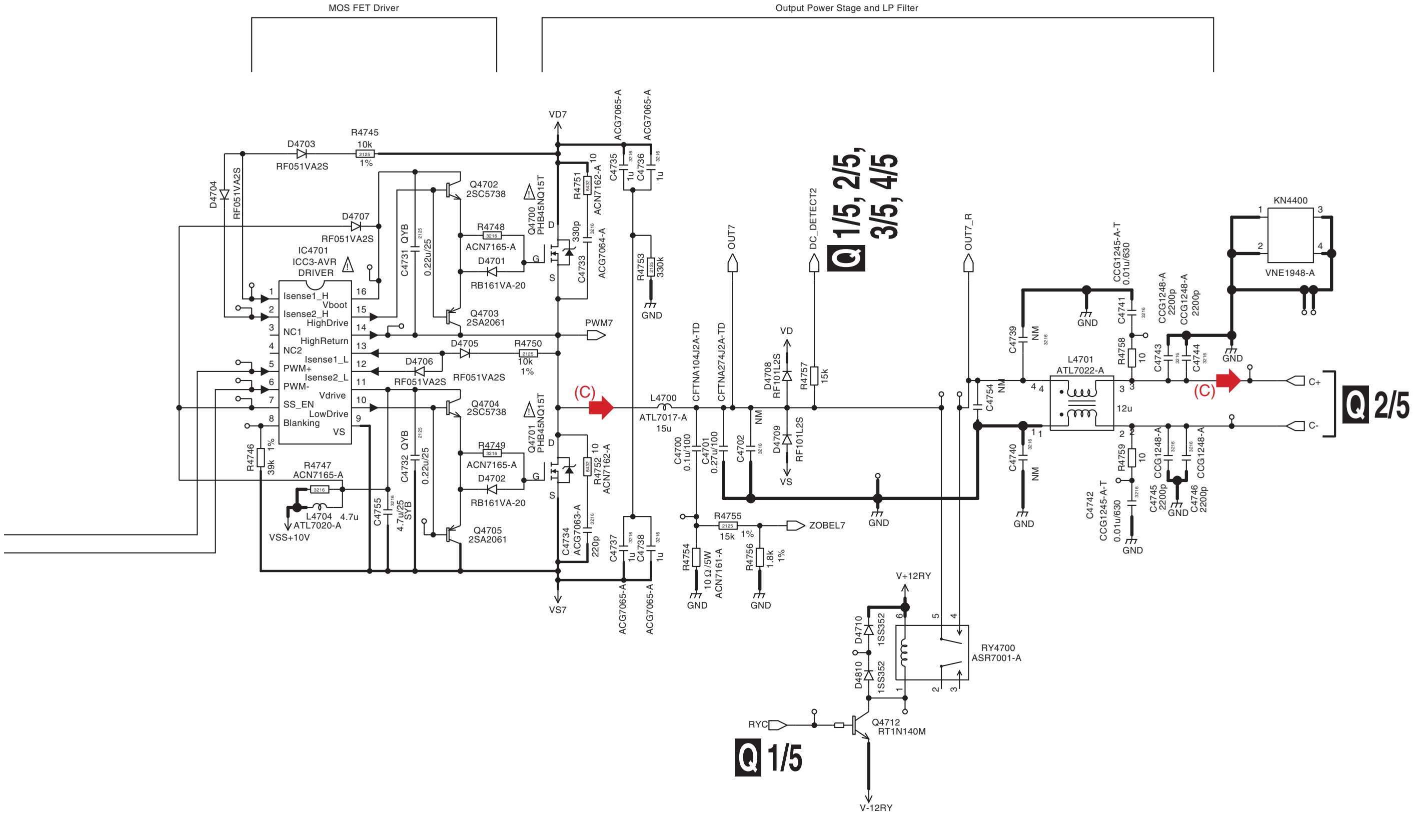
10.25 ICEPOWER AMP (5/5)

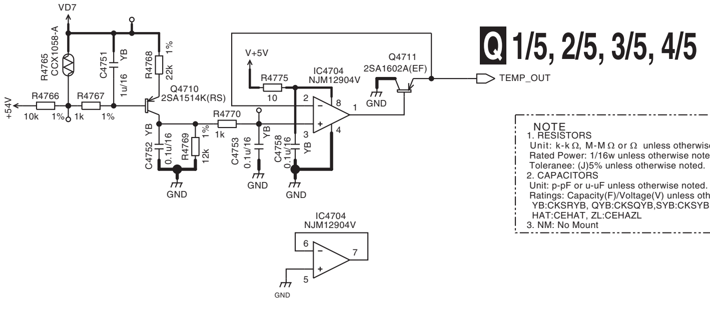

CN4700
XKP3062-A
P CN3810
C+
C-
GNDC
V+12C
V-12C
V+12V
V-12V
GND
R4700 100 0.5%
R4701 100 0.5%
C4710 NM
C4711 NM
C4704 ACG7069-A 1000p
C4705 ACG7069-A 1000p
D4700 1SS302
V-5V
V+5V
R4702 910 0.5%
R4703 910 0.5%
(C)
R4708 NM
C4706 ACG7072-A 470p
R4704 1k 0.5%
R4705 1k 0.5%
C4707 470p ACG7072-A
C4708 220u/25 HAT
C4709 0.01u/16
CFHXSQ103J16-T
R4706 0
IC4702 (1/2) UPC4570G2-A
C_IN
C4809 CFHXSQ103J16-T 0.01u/16
R4806 0
C4808 220u/25 HAT
IC4702 (2/2) UPC4570G2-A
DC offset
C4720 1u/10 YB
R4718 4.7k
IC4703 (2/2) NJM4565MD
C4719 0.47u/16 QYB
R4720 220k
R4722 240k
R4719 1M
C4721 0.1u/16 YB
R4721 1.8k
MOD7
R4717 100k
R4715 0
C4717 100u ACH1479-A
C4718 1u/10 YB
C4760 CH 1000p/50
C4817 100u ACH1479-A
C4818 1u/10 YB
C4860 CH 1000p/50
R4815 0
V-5VFILT4
R4771 0
R4772 NM
C4715 1u/10
R4723 1k 1%
C4722 2200p ACG7073-A
R4724 27k 1%
R4725 1k 1%
R4726 1.5k 1%
R4727 1.5k 1%
R4729 1/8W
OUT7_R
R4730 47k 1% 1/8W
OUT7
R4776 1.8k 1%
R4731 68k 1% 1/8W
R4732 18k 1%
C4723 39p ACG7066-A
R4728 27k 1%
R4733 1.8k 1%
R4734 1.2k 1%
R4735 1.8k 1%
R4736 15k 1%
C4724 56p ACG7078-A
C4725 47p ACG7071-A
C4726 75p ACG7079-A
R4737 27k 1% 1/4W
R4777 20k 1% 1/4W
PWM7
R4740 10k
R4743 1k
C4730 1u/10 YB
D4711 NM
R4742 0
R4741 15k
Q4709 2SC4154(EFG)
C4729 0.1u/16 YB
OSC1
Q 1/5, 2/5, 3/5, 4/5
C4727 4.7P ACG7070-A
C4728 2.2u ACG7073-A
R4738 2.7k 1%
R4739 56k 1%
R4744 1k
V-5VFILT4
Q4706
Q4707
2SA1682(4)
(C)
IC4700 ICC1-AVR
Q 1/5, 2/5, 3/5
AMUTE
R4714 4.7k
C4716 1u/16 YB
Q4708 2SD2704K
R4711 220k
C4759 NM
R4712 22k
C4714 680p ACG7068-A-T
C_IN
R4710 470
C4712 100u ACH1479-A
C4713 100u ACH1479-A
R4713 NM
R4778 NM
CS1_ch1
CS2_ch1
RECout_ch1
Vin__ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
CS1_ch2
CS2_ch2
Ref_ch2
MODULATOR
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Pwm+_ch1
Pwm-_ch1
Mod_ch1
ZobelSense1
NTC_in
Average1
Average2
ZobelSense2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
In_B_Ch2
Out_B_Ch2
In_C_Ch2
MOD7
ZOBEL7
C4748 1u/10 YB
R4774 1M
R4999 10k
R4998 10k
V-5VFILT4
Q 1/5, 2/5, 3/5, 4/5
VD_CHK4
VS_CHK4
AMPOVERLOAD
AMPDISABLE4
Q 1/5
R4773 100k
C4756 0.1u/16 YB
DC offset
V+5V
C4747 1u/10 YB
R4760 10
IC4703 (1/2) NJM4565MD
R4860 10
C4847 1u/10 YB
V-5V
V+64V
VD
R4763 105k 1% 1/4W
R4761 ACN7165-A 10
VD7
VD_CHK4
C4757 2200p/50 YB
R4764 3.3k 1%
L4702 ATL7018-A 1u
C4749 560u ACH7304-A
L4703 ATL7018-A 1u
C4750 560u ACH7304-A
C4857 2200p/50 YB
R4864 3.3k 1%
VS_CHK4
R4863 105k 1% 1/4W
R4762 ACN7165-A 10
VS7
V-64V

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

Q 5/5

Q 5/5 ICEPOWER AMP ASSY (AWH7017)


MOS FET Driver
Output Power Stage and LP Filter
VD7
D4703
RF051VA2S
R4745
10k
1%
D4704
RF051VA2S
D4707
RF051VA2S
IC4701
ICC3-AVR
DRIVER
Isense1_H
Vboot
Isense2_H
HighDrive
NC1
HighReturn
NC2
Isense1_L
PWM+
Isense2_L
PWM-
Vdrive
SS_EN
LowDrive
Blanking
VS
R4746
39k
1%
R4747
ACN7165-A
L4704
4.7u
ATL7020-A
VSS+10V
C4755
4.7u/25
SYB
C4731 QYB
0.22u/25
C4732 QYB
0.22u/25
Q4702
2SC5738
Q4703
2SA2061
Q4704
2SC5738
Q4705
2SA2061
R4748
ACN7165-A
D4701
RB161VA-20
R4749
ACN7165-A
D4702
RB161VA-20
Q4700
PHB45NQ15T
Q4701
PHB45NQ15T
R4751
10
ACN7162-A
R4752
10
ACN7162-A
C4733
330p
ACG7064-A
C4734
220p
ACG7063-A
C4735
1u
C4736
1u
C4737
1u
C4738
1u
ACG7065-A
R4753
330k
GND
PWM7
D4705
R4750
10k
1%
D4706
RF051VA2S
VS7
(C)
L4700
ATL7017-A
15u
C4700
0.1u/100
CFTNA104J2A-TD
C4701
0.27u/100
CFTNA274J2A-TD
C4702
NM
R4754
10 Ω /5W
ACN7161-A
R4755
15k 1%
R4756
1.8k
1%
ZOBEL7
OUT7
DC_DETECT2
D4708
RF101L2S
D4709
RF101L2S
VD
VS
R4757
15k
Q 1/5, 2/5, 3/5, 4/5
OUT7_R
C4754
NM
C4739
NM
C4740
NM
L4701
ATL7022-A
12u
R4758
10
R4759
10
C4741
0.01u/630
CCG1245-A-T
C4742
0.01u/630
CCG1245-A-T
C4743
2200p
CCG1248-A
C4744
2200p
CCG1248-A
C4745
2200p
CCG1248-A
C4746
2200p
CCG1248-A
KN4400
VNE1948-A
C+
C-
Q 2/5
V+12RY
D4710
1SS352
D4810
1SS352
RY4700
ASR7001-A
RYC
Q 1/5
Q4712
RT1N140M
V-12RY


VD7
R4765
CCX1058-A
C4751
1u/16
YB
R4768
22k
1%
+5.4V
R4766
10k 1%
R4767
1k 1%
Q4710
2SA1514K(RS)
C4752
0.1u/16
YB
R4769
12k
1%
GND
R4770
1k
C4753
0.1u/16
YB
C4758
0.1u/16
YB
V+5V
R4775
10
IC4704
NJM12904V
Q4711
2SA1602A(EF)
TEMP_OUT
IC4704
NJM12904V
GND

Q 1/5, 2/5, 3/5, 4/5

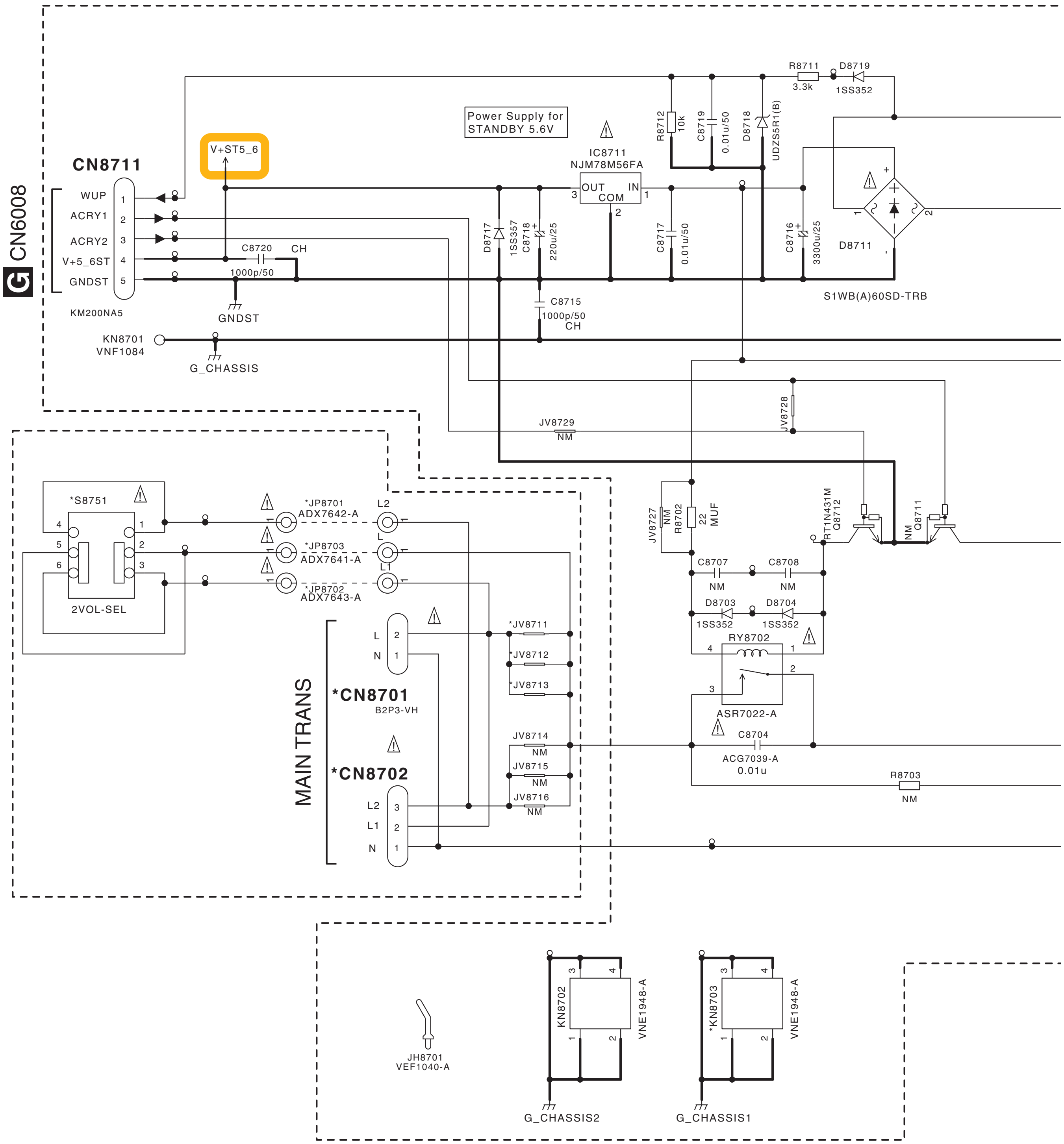
(C) : Audio Signal Route (Center)

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Tolerane: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCSRCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

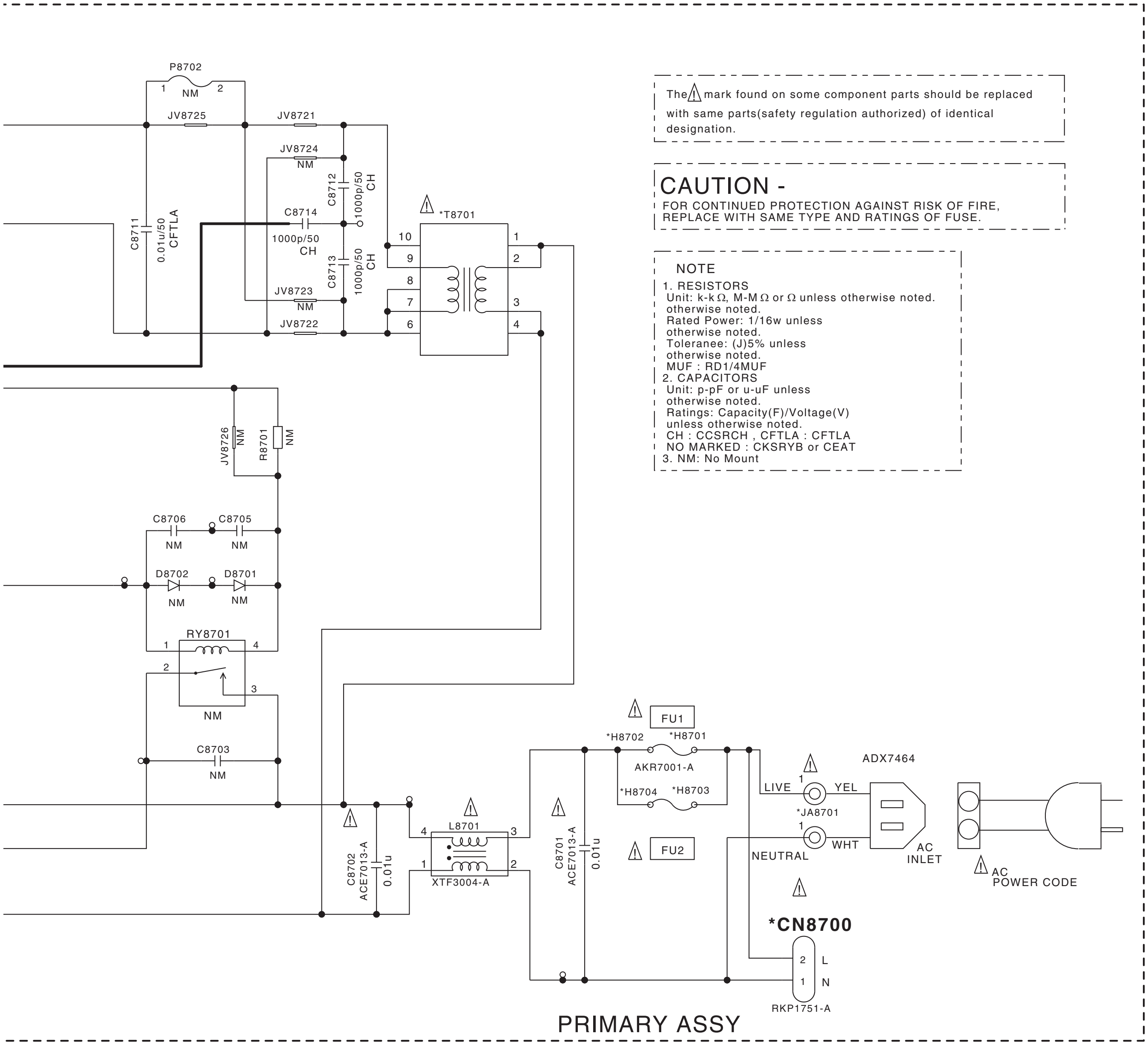
10.26 PRIMARY ASSY

	AWX9166
CN8701	NM
CN8702	B3P5-VH
JP8701	NM
JP8702	NM
JP8703	NM
JP8701_1	NM
JP8702_1	NM
JP8703_1	NM
JV8711	
JV8712	
JV8713	
S8751	NM


G CN6008
CN8711
WUP 1
ACRY1 2
ACRY2 3
V+5_6ST 4
GNDST 5
KM200NA5
V+ST5_6
C8720 1000p/50 CH
GNDST
KN8701 VNF1084
G_CHASSIS
Power Supply for STANDBY 5.6V
IC8711 NJM78M56FA
OUT IN COM
D8717 1SS357
C8718 220u/25
C8715 1000p/50 CH
C8717 0.01u/50
R8712 10k
C8719 0.01u/50
D8718 UDZS5R1(B)
R8711 3.3k
D8719 1SS352
C8716 3300u/25
D8711 S1WB(A)60SD-TRB
JV8729 NM
JV8728
JV8727 NM
R8702 22 MUF
RT1N431M Q8712
NM Q8711
C8707 NM
C8708 NM
D8703 1SS352
D8704 1SS352
RY8702 ASR7022-A
C8704 ACG7039-A 0.01u
R8703 NM
*S8751
2VOL-SEL
*JP8701 ADX7642-A
*JP8703 ADX7641-A
*JP8702 ADX7643-A
L2 L L1
MAIN TRANS
*CN8701 B2P3-VH
L N
*CN8702
L2 L1 N
*JV8711
*JV8712
*JV8713
JV8714 NM
JV8715 NM
JV8716 NM
JH8701 VEF1040-A
KN8702 VNE1948-A
G_CHASSIS2
*KN8703 VNE1948-A
G_CHASSIS1

T PRIMARY ASSY (AWX9166)

	AWX9166
CN8700	NM
H8701	AKR7001-A
H8702	AKR7001-A
H8703	NM
H8704	NM
JA8701	ADX7464-A
JA8701_1	ADX7464-A_1
KN8703	VNE1948-A
T8701	ATT7040-A


P8702
1 NM 2
JV8725
JV8721
JV8724 NM
C8712 1000p/50 CH
C8714 1000p/50 CH
C8713 1000p/50 CH
JV8723 NM
JV8722
C8711 0.01u/50 CFTLA
*T8701
10 9 8 7 6
1 2 3 4
JV8726 NM
R8701 NM
C8706 NM
C8705 NM
D8702 NM
D8701 NM
RY8701
1 4 2 3
NM
C8703 NM
FU1
*H8702 *H8701
AKR7001-A
*H8704 *H8703
FU2
L8701
4 3 1 2
XTF3004-A
C8702 ACE7013-A 0.01u
C8701 ACE7013-A 0.01u
ADX7464
LIVE 1 YEL
*JA8701
1 WHT
NEUTRAL
AC INLET
AC POWER CODE
*CN8700
2 L
1 N
RKP1751-A
PRIMARY ASSY

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

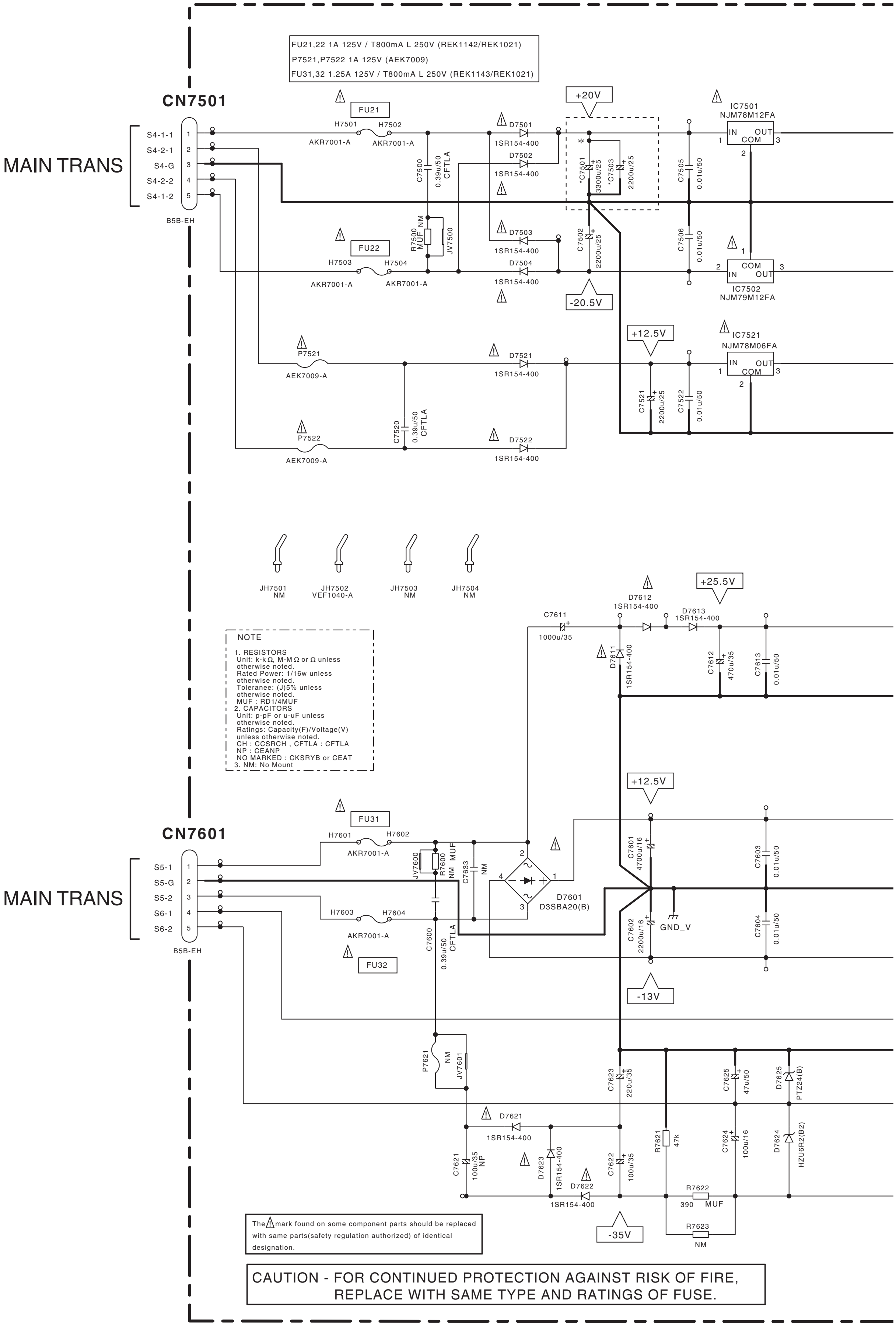
CAUTION -
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted. otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
MUF : RD1/4MUF
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH , CFTLA : CFTLA
NO MARKED : CKSRYB or CEAT
3. NM: No Mount

10.27 REG ASSY

V REG ASSY (AWX9152)

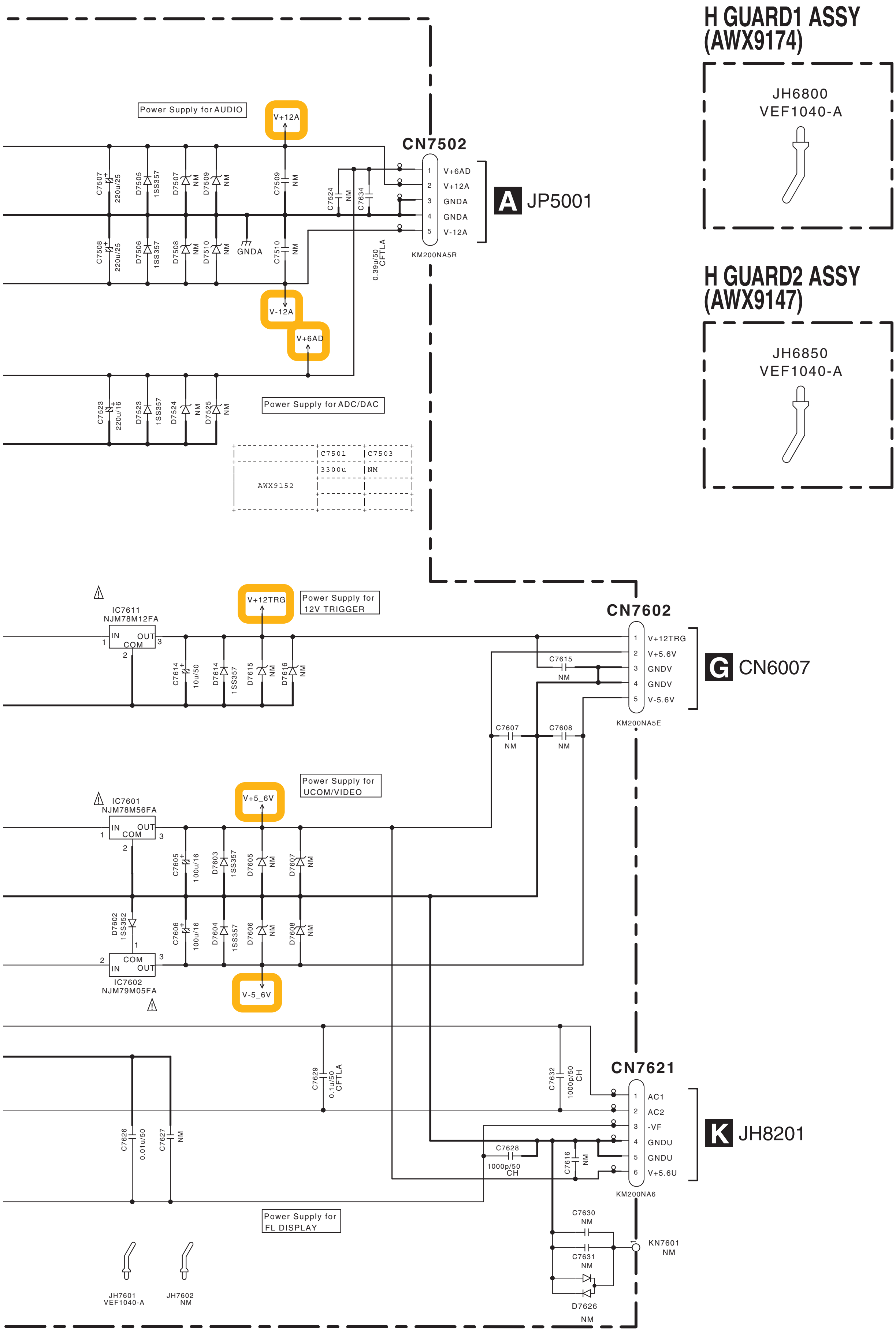
CAUTION:FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.REPLACE ONLY WITH SAME TYPE NO.491001 MFD,BY LITTELFUSE INC.FOR P7521 and P7522.


FU21,22 1A 125V / T800mA L 250V (REK1142/REK1021)
P7521,P7522 1A 125V (AEK7009)
FU31,32 1.25A 125V / T800mA L 250V (REK1143/REK1021)
CN7501
MAIN TRANS
S4-1-1
S4-2-1
S4-G
S4-2-2
S4-1-2
B5B-EH
FU21
H7501
H7502
AKR7001-A
C7500
0.39u/50 CFTLA
R7500 NM MUF
JV7500
FU22
H7503
H7504
D7501
D7502
D7503
D7504
1SR154-400
+20V
*C7501 3300u/25
*C7503 2200u/25
C7502 2200u/25
-20.5V
C7505 0.01u/50
C7506 0.01u/50
IC7501 NJM78M12FA
IN OUT COM
IC7502 NJM79M12FA
P7521
P7522
AEK7009-A
C7520 0.39u/50 CFTLA
D7521
D7522
+12.5V
IC7521 NJM78M06FA
C7521 2200u/25
C7522 0.01u/50
JH7501 NM
JH7502 VEF1040-A
JH7503 NM
JH7504 NM
+25.5V
C7611 1000u/35
D7611 1SR154-400
D7612 1SR154-400
D7613 1SR154-400
C7612 470u/35
C7613 0.01u/50
CN7601
MAIN TRANS
S5-1
S5-G
S5-2
S6-1
S6-2
B5B-EH
FU31
H7601
H7602
JV7600
R7600 NM MUF
C7633 NM
H7603
H7604
FU32
C7600 0.39u/50 CFTLA
D7601 D3SBA20(B)
+12.5V
C7601 4700u/16
C7602 2200u/16
GND_V
C7603 0.01u/50
C7604 0.01u/50
-13V
P7621 NM
JV7601
D7621 1SR154-400
C7621 100u/35 NP
D7623 1SR154-400
D7622 1SR154-400
C7622 100u/35
C7623 220u/35
R7621 47k
R7622 390 MUF
R7623 NM
C7625 47u/50
C7624 100u/16
D7625 PTZ24(B)
D7624 HZU6R2(B2)
-35V

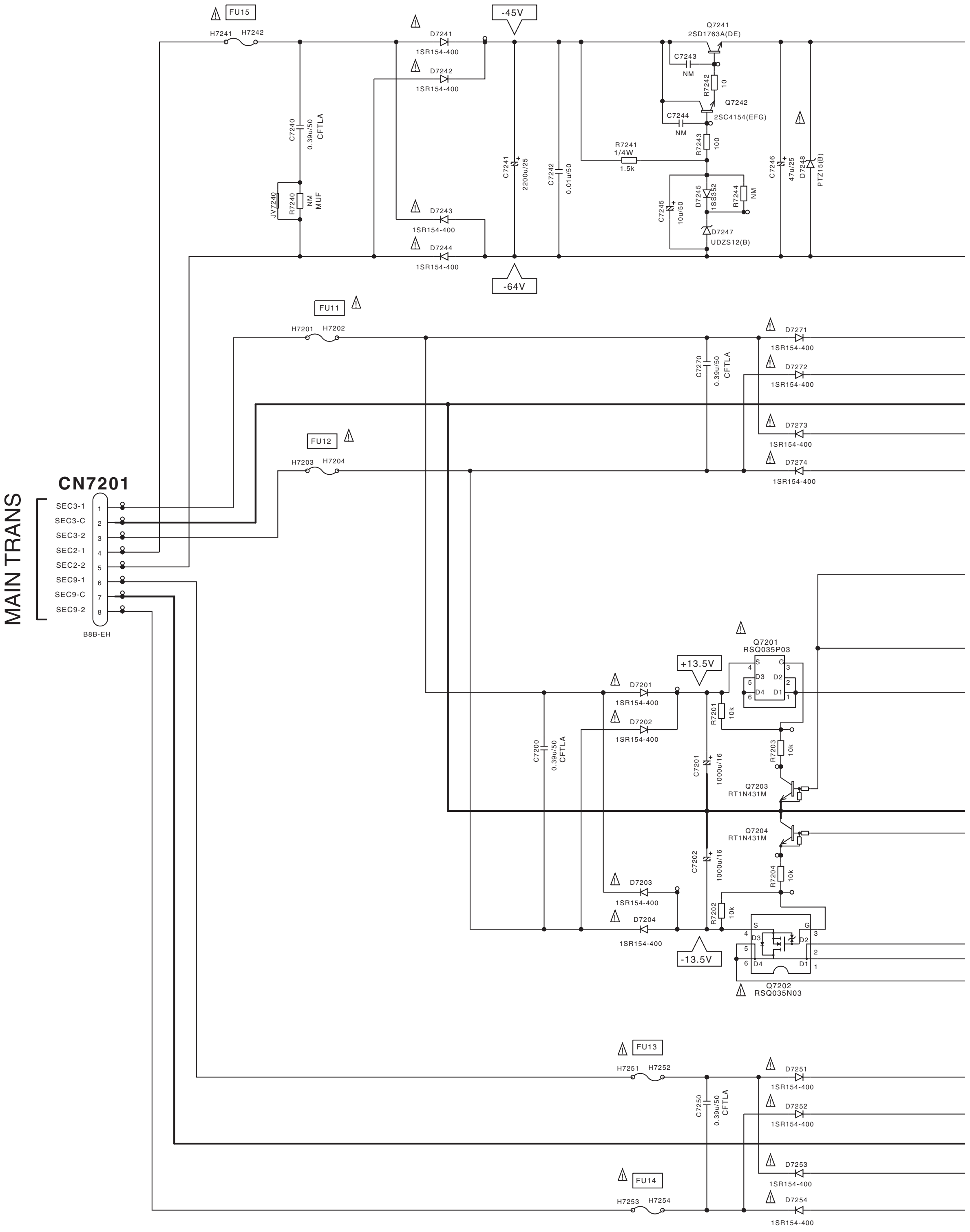
NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
MUF : RD1/4MUF
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH , CFTLA : CFTLA
NP : CEANP
NO MARKED : CKSRYB or CEAT
3. NM: No Mount

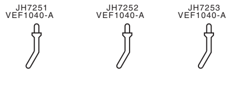
The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS OF FUSE.


H GUARD1 ASSY
(AWX9174)
JH6800
VEF1040-A
H GUARD2 ASSY
(AWX9147)
JH6850
VEF1040-A
Power Supply for AUDIO
V+12A
CN7502
1 V+6AD
2 V+12A
3 GNDA
4 GNDA
5 V-12A
KM200NA5R
A JP5001
C7507 220u/25
D7505 1SS357
D7507 NM
D7509 NM
C7509 NM
C7524 NM
C7634 0.39u/50 CFTLA
C7508 220u/25
D7506 1SS357
D7508 NM
D7510 NM
GNDA
C7510 NM
V-12A
V+6AD
C7523 220u/16
D7523 1SS357
D7524 NM
D7525 NM
Power Supply for ADC/DAC
AWX9152
C7501 3300u
C7503 NM
IC7611
NJM78M12FA
IN OUT COM
V+12TRG
Power Supply for 12V TRIGGER
C7614 10u/50
D7614 1SS357
D7615 NM
D7616 NM
CN7602
1 V+12TRG
2 V+5.6V
3 GNDV
4 GNDV
5 V-5.6V
KM200NA5E
G CN6007
C7615 NM
C7607 NM
C7608 NM
IC7601
NJM78M56FA
V+5_6V
Power Supply for UCOM/VIDEO
C7605 100u/16
D7603 1SS357
D7605 NM
D7607 NM
D7602 1SS352
C7606 100u/16
D7604 1SS357
D7606 NM
D7608 NM
IC7602
NJM79M05FA
V-5_6V
C7629 0.1u/50 CFTLA
C7632 1000p/50 CH
CN7621
1 AC1
2 AC2
3 -VF
4 GNDU
5 GNDU
6 V+5.6U
KM200NA6
K JH8201
C7626 0.01u/50
C7627 NM
C7628 1000p/50 CH
C7616 NM
C7630 NM
C7631 NM
D7626 NM
KN7601 NM
Power Supply for FL DISPLAY
JH7601 VEF1040-A
JH7602 NM

10.28 ICE REG ASSY


FU15
H7241 H7242
D7241
1SR154-400
-45V
D7242
1SR154-400
Q7241
2SD1763A(DE)
C7243
NM
R7242
10
Q7242
2SC4154(EFG)
C7244
NM
R7243
100
R7241
1/4W
1.5k
C7240
0.39u/50
CFTLA
JV7240
R7240
NM
MUF
C7241
2200u/25
C7242
0.01u/50
C7245
10u/50
D7245
1SS352
R7244
NM
D7247
UDZS12(B)
C7246
47u/25
D7248
PTZ15(B)
D7243
1SR154-400
D7244
1SR154-400
-64V
FU11
H7201 H7202
D7271
1SR154-400
C7270
0.39u/50
CFTLA
D7272
1SR154-400
D7273
1SR154-400
FU12
H7203 H7204
D7274
1SR154-400
CN7201
MAIN TRANS
SEC3-1
SEC3-C
SEC3-2
SEC2-1
SEC2-2
SEC9-1
SEC9-C
SEC9-2
1
2
3
4
5
6
7
8
B8B-EH
Q7201
RSQ035P03
S G
D3 D2
D4 D1
4 3
5 2
6 1
+13.5V
D7201
1SR154-400
D7202
1SR154-400
R7201
10k
C7200
0.39u/50
CFTLA
C7201
1000u/16
R7203
10k
Q7203
RT1N431M
Q7204
RT1N431M
C7202
1000u/16
R7204
10k
D7203
1SR154-400
D7204
1SR154-400
R7202
10k
-13.5V
Q7202
RSQ035N03
FU13
H7251 H7252
D7251
1SR154-400
C7250
0.39u/50
CFTLA
D7252
1SR154-400
D7253
1SR154-400
FU14
H7253 H7254
D7254
1SR154-400

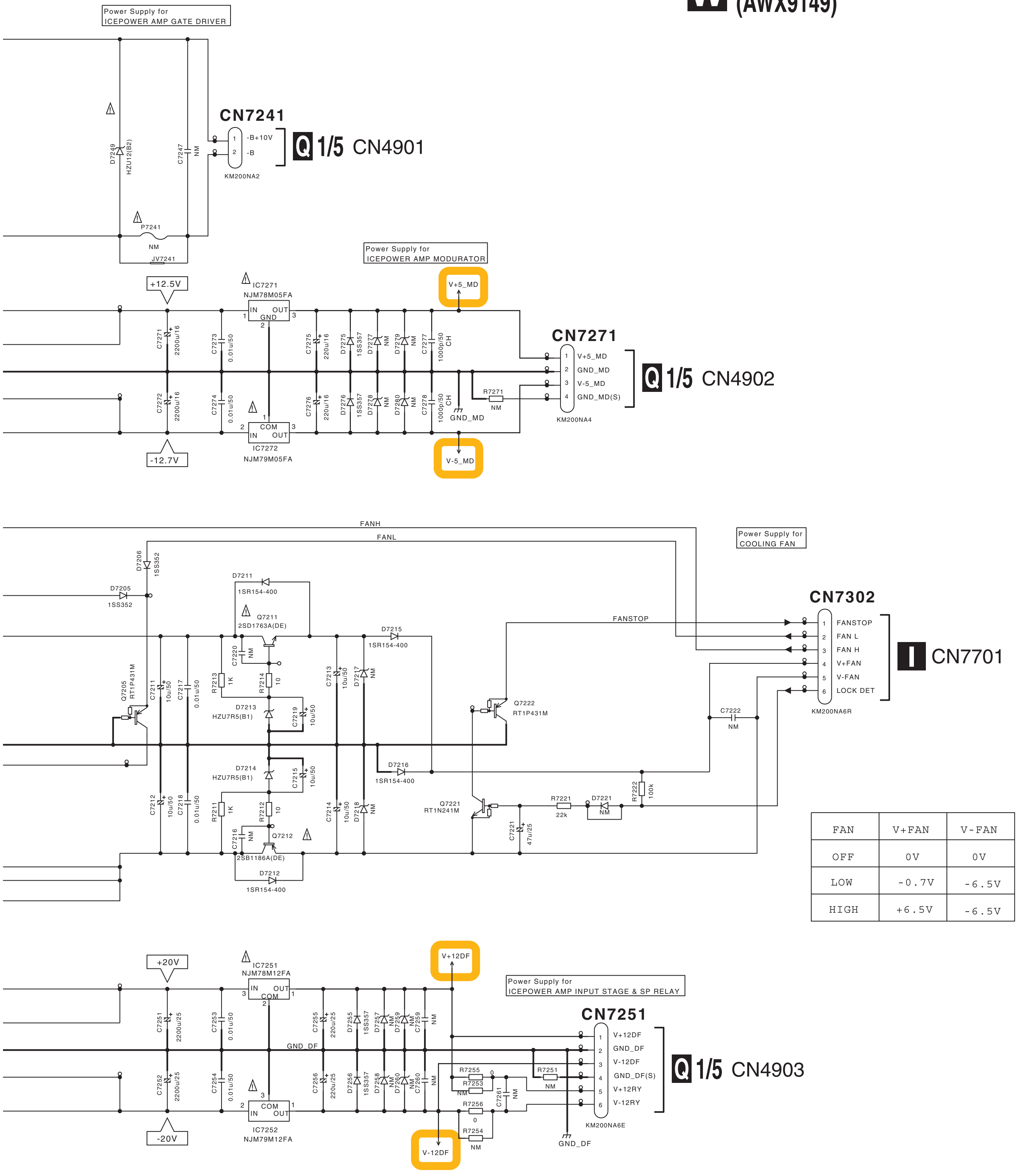

JH7251
VEF1040-A
JH7252
VEF1040-A
JH7253
VEF1040-A

NOTE

1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
MUF : RD1/4MUF
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH , CFTLA : CFTLA
NO MARKED : CKSRYB or CEAT
3. NM: No Mount

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

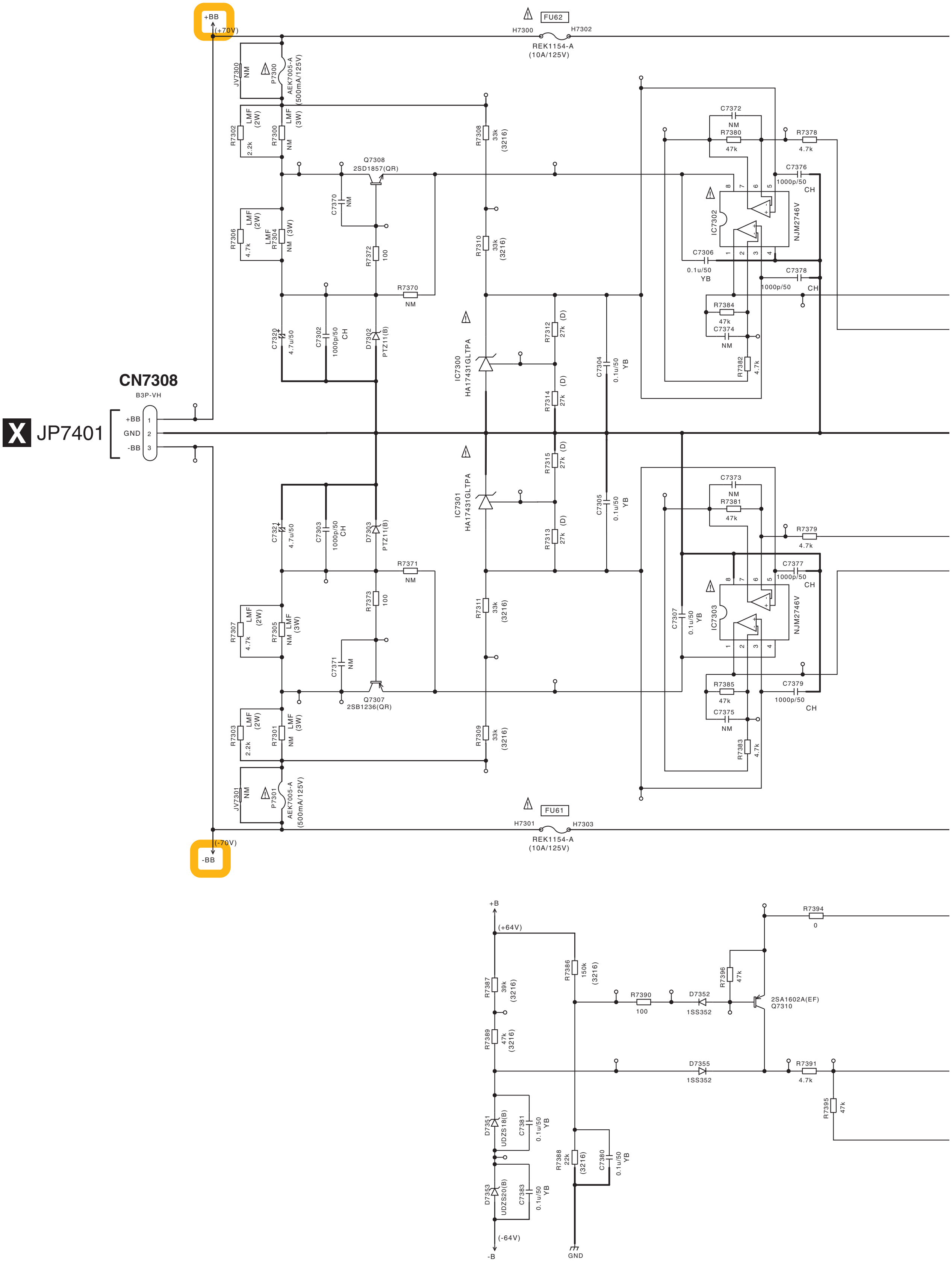
W ICE REG ASSY (AWX9149)


Power Supply for ICEPOWER AMP GATE DRIVER
D7249
HZU12(B2)
C7247
NM
CN7241
1 -B+10V
2 -B
KM200NA2
Q 1/5 CN4901
P7241
NM
JV7241
Power Supply for ICEPOWER AMP MODURATOR
+12.5V
IC7271
NJM78M05FA
IN OUT GND
V+5_MD
C7271 2200u/16
C7273 0.01u/50
C7275 220u/16
D7275 1SS357
D7277 NM
D7279 NM
C7277 1000p/50 CH
CN7271
1 V+5_MD
2 GND_MD
3 V-5_MD
4 GND_MD(S)
KM200NA4
Q 1/5 CN4902
R7271 NM
GND_MD
C7272 2200u/16
C7274 0.01u/50
C7276 220u/16
D7276 1SS357
D7278 NM
D7280 NM
C7278 1000p/50 CH
COM IN OUT
IC7272
NJM79M05FA
-12.7V
V-5_MD
FANH
FANL
Power Supply for COOLING FAN
D7206 1SS352
D7205 1SS352
D7211 1SR154-400
Q7211 2SD1763A(DE)
D7215 1SR154-400
FANSTOP
CN7302
1 FANSTOP
2 FAN L
3 FAN H
4 V+FAN
5 V-FAN
6 LOCK DET
KM200NA6R
I CN7701
C7220 NM
R7213 1K
R7214 10
D7213 HZU7R5(B1)
C7219 10u/50
C7213 10u/50
D7217 NM
Q7222 RT1P431M
C7222 NM
Q7205 RT1P431M
C7211 10u/50
C7217 0.01u/50
D7214 HZU7R5(B1)
C7215 10u/50
D7216 1SR154-400
Q7221 RT1N241M
R7221 22k
D7221 NM
R7222 100k
C7221 47u/25
C7212 10u/50
C7218 0.01u/50
R7211 1K
R7212 10
C7216 NM
Q7212
2SB1186A(DE)
D7212 1SR154-400
C7214 10u/50
D7218 NM
+20V
IC7251
NJM78M12FA
IN OUT COM
V+12DF
Power Supply for ICEPOWER AMP INPUT STAGE & SP RELAY
C7251 2200u/25
C7253 0.01u/50
C7255 220u/25
D7255 1SS357
D7257 NM
D7259 NM
C7259 NM
CN7251
1 V+12DF
2 GND_DF
3 V-12DF
4 GND_DF(S)
5 V+12RY
6 V-12RY
KM200NA6E
Q 1/5 CN4903
GND_DF
R7255 0
R7253 NM
R7251 NM
R7256 0
C7261 NM
R7254 NM
C7252 2200u/25
C7254 0.01u/50
C7256 220u/25
D7256 1SS357
D7258 NM
D7260 NM
C7260 NM
COM IN OUT
IC7252
NJM79M12FA
-20V
V-12DF

FAN	V+FAN	V-FAN
OFF	0V	0V
LOW	-0.7V	-6.5V
HIGH	+6.5V	-6.5V

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

10.29 B REG ASSY


+BB
(+70V)
FU62
H7300
H7302
REK1154-A
(10A/125V)
JV7300
NM
P7300
AEK7005-A
(500mA/125V)
R7302
2.2k
LMF
(2W)
R7300
NM
LMF
(3W)
R7308
33k
(3216)
Q7308
2SD1857(QR)
C7370
NM
R7372
100
R7306
4.7k
LMF
(2W)
R7304
NM
LMF
(3W)
R7310
33k
(3216)
R7370
NM
C7320
4.7u/50
C7302
1000p/50
CH
D7302
PTZ11(B)
IC7300
HA17431GLTPA
R7312
27k
(D)
R7314
27k
(D)
C7304
0.1u/50
YB
C7372
NM
R7380
47k
R7378
4.7k
C7376
1000p/50
CH
IC7302
NJM2746V
C7306
0.1u/50
YB
C7378
1000p/50
CH
R7384
47k
C7374
NM
R7382
4.7k
CN7308
B3P-VH
X
JP7401
+BB
GND
-BB
1
2
3
IC7301
HA17431GLTPA
R7315
27k
(D)
R7313
27k
(D)
C7305
0.1u/50
YB
C7321
4.7u/50
C7303
1000p/50
CH
D7303
PTZ11(B)
R7371
NM
R7373
100
R7307
4.7k
LMF
(2W)
R7305
NM
LMF
(3W)
R7311
33k
(3216)
C7371
NM
Q7307
2SB1236(QR)
R7303
2.2k
LMF
(2W)
R7301
NM
LMF
(3W)
R7309
33k
(3216)
JV7301
NM
P7301
AEK7005-A
(500mA/125V)
C7373
NM
R7381
47k
R7379
4.7k
C7377
1000p/50
CH
IC7303
NJM2746V
C7307
0.1u/50
YB
R7385
47k
C7379
1000p/50
CH
C7375
NM
R7383
4.7k
FU61
H7301
H7303
REK1154-A
(10A/125V)
(-70V)
-BB
+B
(+64V)
R7387
39k
(3216)
R7386
150k
(3216)
R7389
47k
(3216)
R7390
100
D7352
1SS352
R7396
47k
2SA1602A(EF)
Q7310
R7394
0
D7355
1SS352
R7391
4.7k
R7395
47k
D7351
UDZS18(B)
C7381
0.1u/50
YB
R7388
22k
(3216)
C7380
0.1u/50
YB
D7353
UDZS20(B)
C7383
0.1u/50
YB
(-64V)
-B
GND

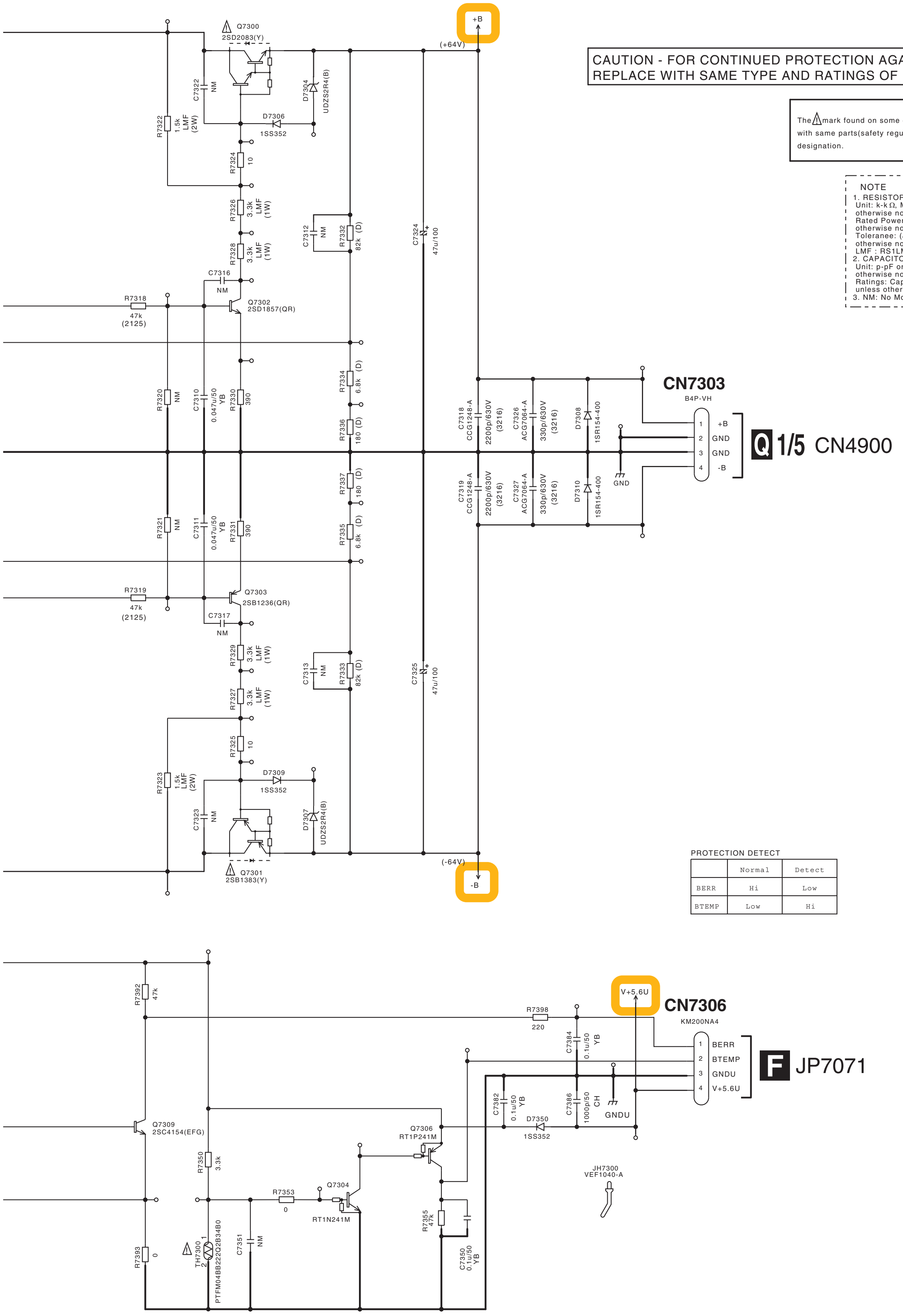
Y B REG ASSY (AWX9150)

CAUTION:FOR CONTINUED PROTECTION AGAINST
RISK OF FIRE.REPLACE ONLY WITH
SAME TYPE NO.491,500 MFD,BY
LITTELFUSE INC.FOR P7300 and P7301.

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
LMF : RS1LMF,RS2LMF,RS3LMF
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
3. NM: No Mount



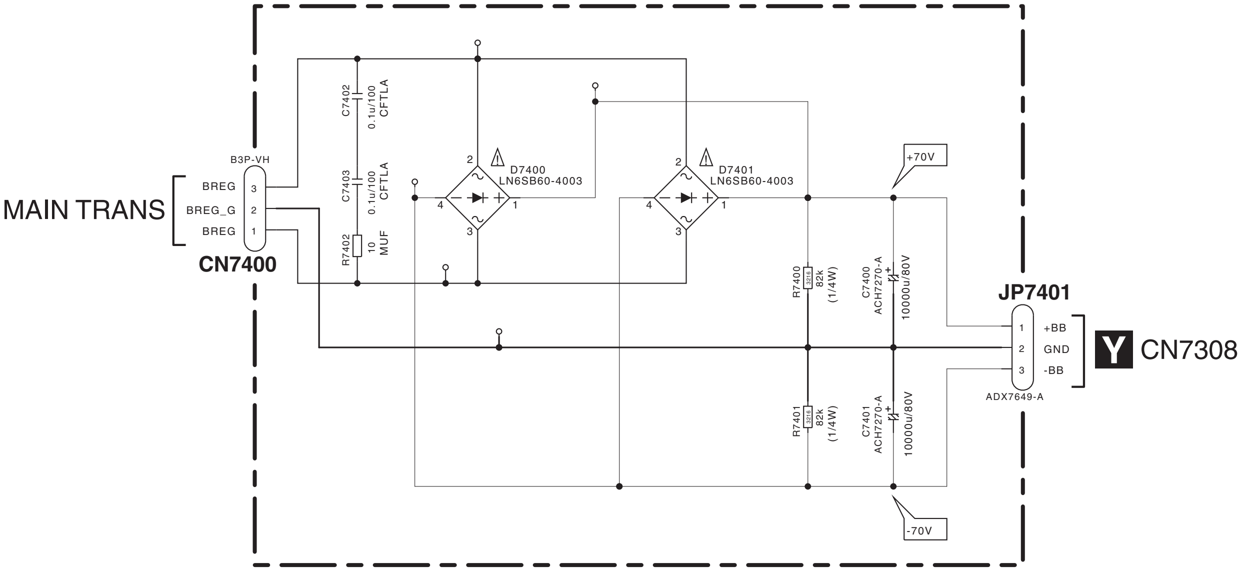
Q7300
2SD2083(Y)
+B
(+64V)
C7322 NM
R7322 1.5k LMF (2W)
D7304 UDZS2R4(B)
D7306 1SS352
R7324 10
R7326 3.3k LMF (1W)
R7328 3.3k LMF (1W)
C7312 NM
R7332 82k (D)
C7324 47u/100
C7316 NM
R7318 47k (2125)
Q7302 2SD1857(QR)
R7320 NM
C7310 0.047u/50 YB
R7330 390
R7334 6.8k (D)
R7336 180 (D)
C7318 CCG1248-A 2200p/630V (3216)
C7326 ACG7064-A 330p/630V (3216)
D7308 1SR154-400
CN7303
B4P-VH
1 +B
2 GND
3 GND
4 -B
GND
Q 1/5 CN4900
C7319 CCG1248-A 2200p/630V (3216)
C7327 ACG7064-A 330p/630V (3216)
D7310 1SR154-400
R7337 180 (D)
R7335 6.8k (D)
R7321 NM
C7311 0.047u/50 YB
R7331 390
R7319 47k (2125)
Q7303 2SB1236(QR)
C7317 NM
R7329 3.3k LMF (1W)
C7313 NM
R7333 82k (D)
C7325 47u/100
R7327 3.3k LMF (1W)
R7325 10
R7323 1.5k LMF (2W)
D7309 1SS352
C7323 NM
D7307 UDZS2R4(B)
(-64V)
-B
Q7301 2SB1383(Y)
R7392 47k
R7398 220
V+5.6U
CN7306
KM200NA4
1 BERR
2 BTEMP
3 GNDU
4 V+5.6U
F JP7071
C7384 0.1u/50 YB
C7382 0.1u/50 YB
C7386 1000p/50 CH
GNDU
D7350 1SS352
Q7309 2SC4154(EFG)
Q7306 RT1P241M
R7350 3.3k
R7353 0
Q7304 RT1N241M
JH7300 VEF1040-A
R7355 47k
C7350 0.1u/50 YB
R7393 0
TH7300 PTFM04BB222Q2B34B0
C7351 NM

PROTECTION DETECT

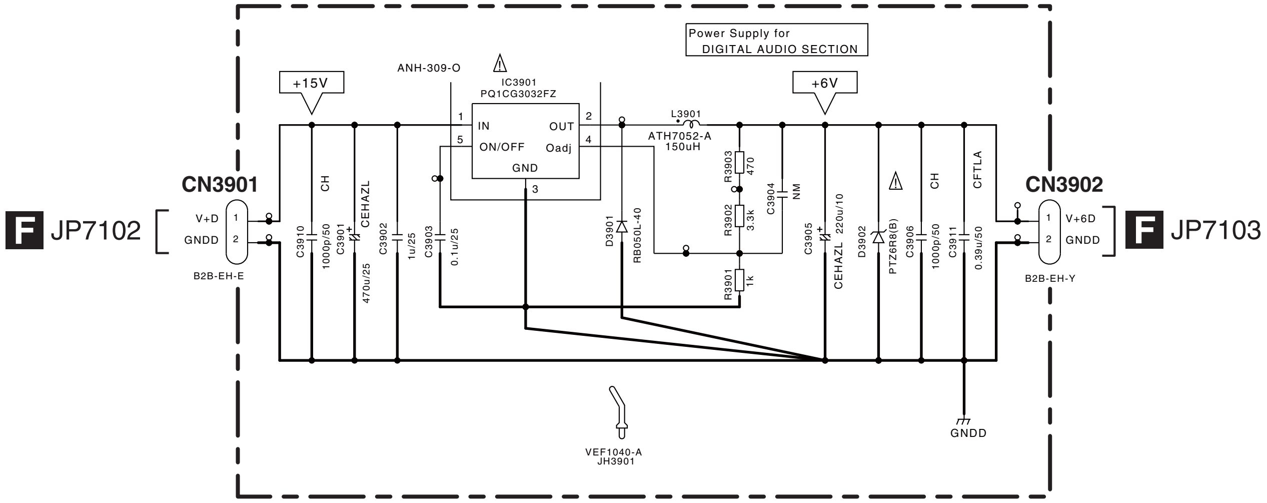
	Normal	Detect
BERR	Hi	Low
BTEMP	Low	Hi

10.30 B DIODE, DCDC, and HDMI RECT ASSYS

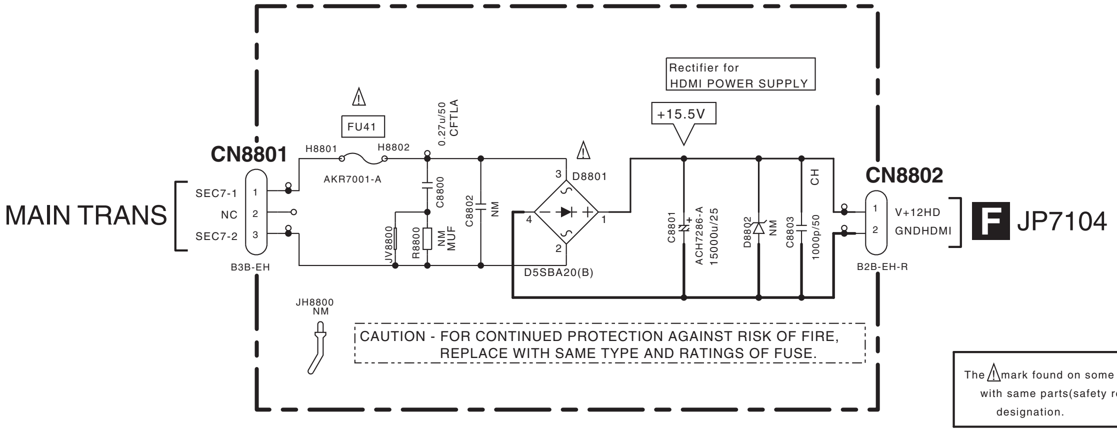
X B DIODE ASSY (AWX9171)


MAIN TRANS
B3P-VH
BREG 3
BREG_G 2
BREG 1
CN7400
C7402 0.1u/100 CFTLA
C7403 0.1u/100 CFTLA
R7402 10 MUF
D7400 LN6SB60-4003
D7401 LN6SB60-4003
+70V
-70V
R7400 82k (1/4W)
R7401 82k (1/4W)
C7400 ACH7270-A 10000u/80V
C7401 ACH7270-A 10000u/80V
JP7401
1 +BB
2 GND
3 -BB
ADX7649-A
Y CN7308

Z DCDC ASSY (AWX9138)


Power Supply for DIGITAL AUDIO SECTION
+15V
+6V
ANH-309-O
IC3901 PQ1CG3032FZ
IN
OUT
ON/OFF
Oadj
GND
L3901 ATH7052-A 150uH
CN3901
F JP7102
V+D 1
GNDD 2
B2B-EH-E
C3910 1000p/50 CH
C3901 470u/25 CEHAZL
C3902 1u/25
C3903 0.1u/25
D3901 RB050L-40
R3903 470
R3902 3.3k
R3901 1k
C3904 NM
C3905 220u/10 CEHAZL
D3902 PTZ6R8(B)
C3906 1000p/50 CH
C3911 0.39u/50 CFTLA
CN3902
1 V+6D
2 GNDD
B2B-EH-Y
F JP7103
GNDD
VEF1040-A JH3901

AA HDMI RECT ASSY (AWX9156)


Rectifier for HDMI POWER SUPPLY
FU41
+15.5V
CN8801
MAIN TRANS
SEC7-1 1
NC 2
SEC7-2 3
B3B-EH
H8801
H8802
AKR7001-A
0.27u/50 CFTLA
C8800
JV8800
R8800 NM MUF
C8802 NM
D8801
D5SBA20(B)
C8801 ACH7286-A 15000u/25
D8802 NM
C8803 1000p/50 CH
CN8802
1 V+12HD
2 GNDHDMI
B2B-EH-R
F JP7104
JH8800 NM

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

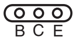
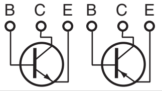
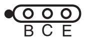
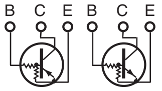
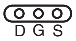
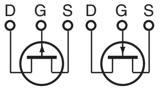
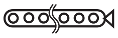
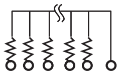
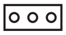
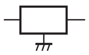
NOTE
1. RESISTORS
   Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
   Rated Power: 1/16w unless otherwise noted.
   Toleranee: (J)5% unless otherwise noted.
   MUF : RD1/4MUF
2. CAPACITORS
   Unit: p-pF or u-uF unless otherwise noted.
   Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
   CFTLA : CFTLA
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

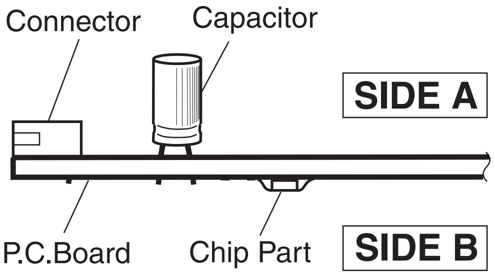
11. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

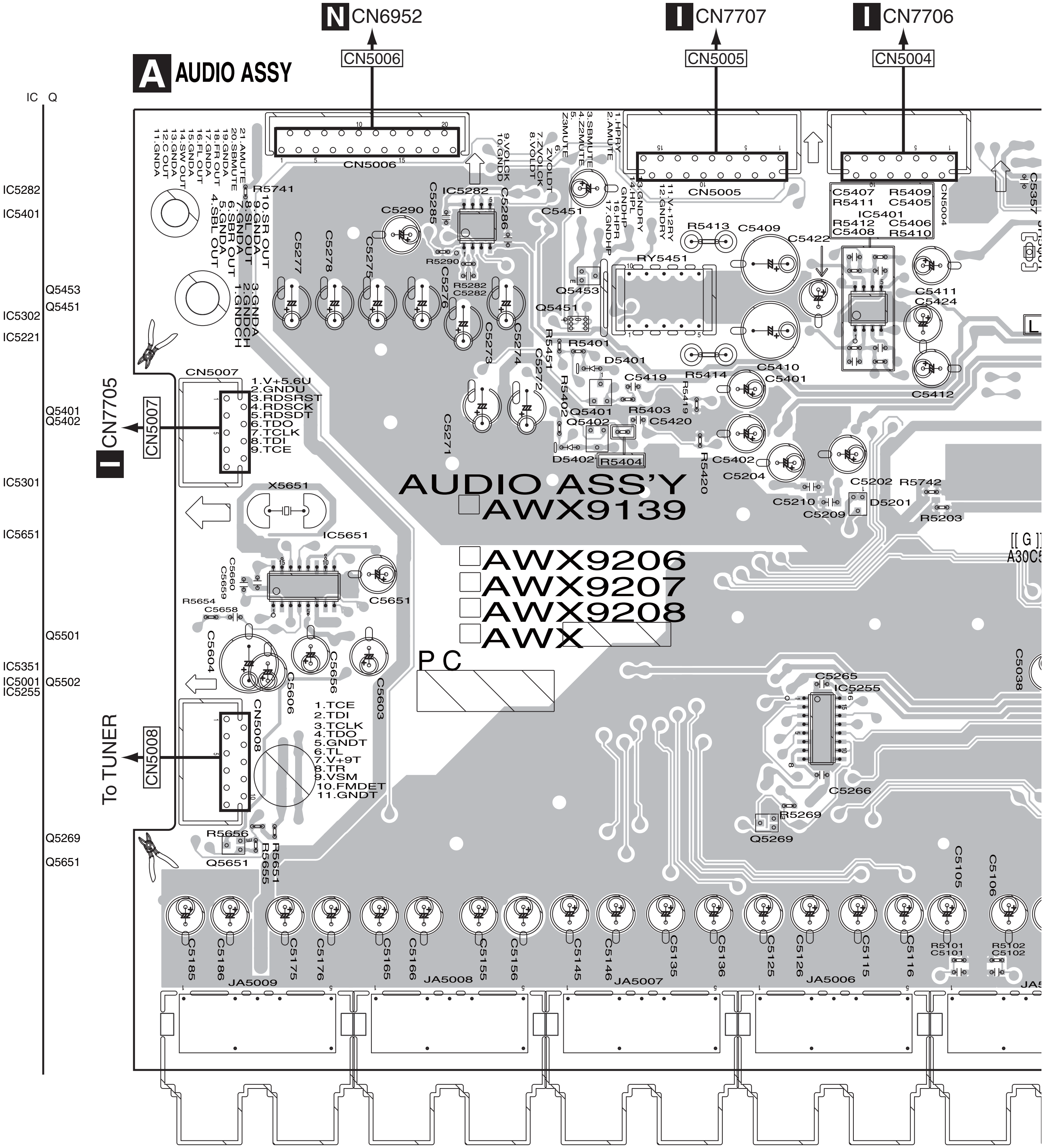
Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.

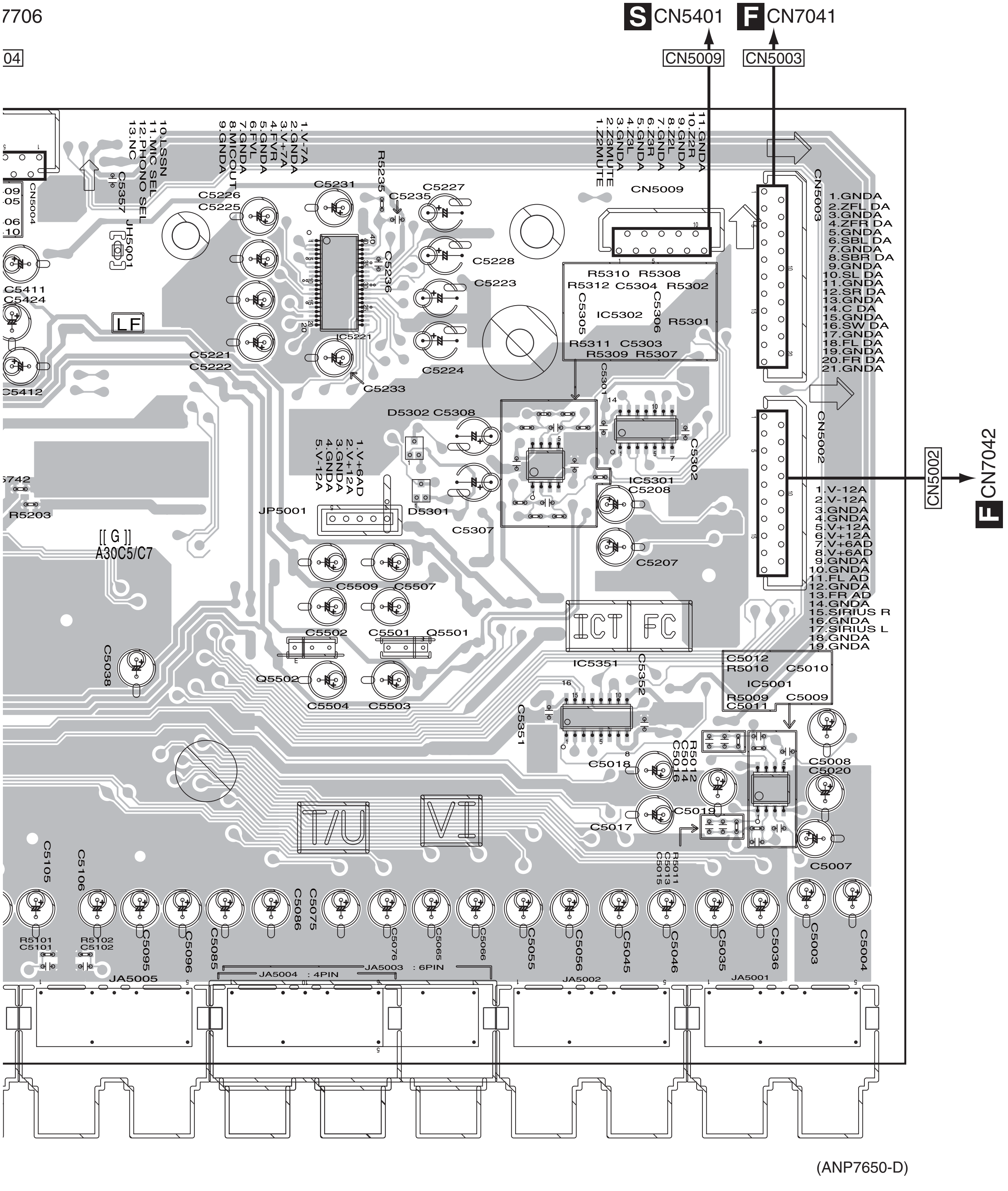

Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B

11.1 AUDIO ASSY

SIDE A


N CN6952
CN5006
I CN7707
CN5005
I CN7706
CN5004
A AUDIO ASSY
IC Q
IC5282
IC5401
Q5453
Q5451
IC5302
IC5221
Q5401
Q5402
IC5301
IC5651
Q5501
IC5351
IC5001
IC5255
Q5502
Q5269
Q5651
I CN7705
CN5007
1.V+5.6U
2.GNDU
3.RDSRST
4.RDSCK
5.RDSDT
6.TDO
7.TCLK
8.TDI
9.TCE
21.AMUTE
20.SBMUTE
19.GNDA
18.FR OUT
17.GNDA
16.FL OUT
15.GNDA
14.SW OUT
13.GNDA
12.C OUT
11.GNDA
10.SR OUT
9.GNDA
8.SL OUT
7.GNDA
6.SBR OUT
5.GNDA
4.SBL OUT
3.GNDA
2.GNDCH
1.GNDCH
9.VOLCK
10.GNDD
8.VOLDT
7.ZVOLCK
6.ZVOLDT
5.Z3MUTE
4.Z2MUTE
3.SBMUTE
2.AMUTE
1.HPRY
13.GNDRY
14.HPL
15.GNDHP
16.HPR
17.GNDHP
11.V+12RY
12.GNDRY
C5407 R5409
R5411 C5405
IC5401
R5412 C5406
C5408 R5410
R5741
C5290
C5285
IC5282
C5286
C5451
R5290
R5282
C5282
C5277
C5278
C5275
C5276
C5273
C5274
C5272
C5271
R5413
C5409
C5422
RY5451
Q5453
Q5451
R5451
R5401
D5401
R5402
C5419
R5414
R5419
C5410
C5401
C5411
C5424
C5412
Q5401
Q5402
R5403
C5420
D5402
R5404
R5420
C5402
C5204
C5202
R5742
C5210
C5209
D5201
R5203
C5357
X5651
IC5651
C5660
C5659
C5651
R5654
C5658
C5604
C5656
C5606
C5603
AUDIO ASS'Y
AWX9139
AWX9206
AWX9207
AWX9208
AWX
PC
[[G]]
A30C5
C5038
C5265
IC5255
C5266
R5269
Q5269
To TUNER
CN5008
1.TCE
2.TDI
3.TCLK
4.TDO
5.GNDT
6.TL
7.V+9T
8.TR
9.VSM
10.FMDET
11.GNDT
R5656
R5651
R5655
Q5651
C5105
C5106
C5185
C5186
C5175
C5176
C5165
C5166
C5155
C5156
C5145
C5146
C5135
C5136
C5125
C5126
C5115
C5116
R5101
C5101
R5102
C5102
JA5009
JA5008
JA5007
JA5006
JA5

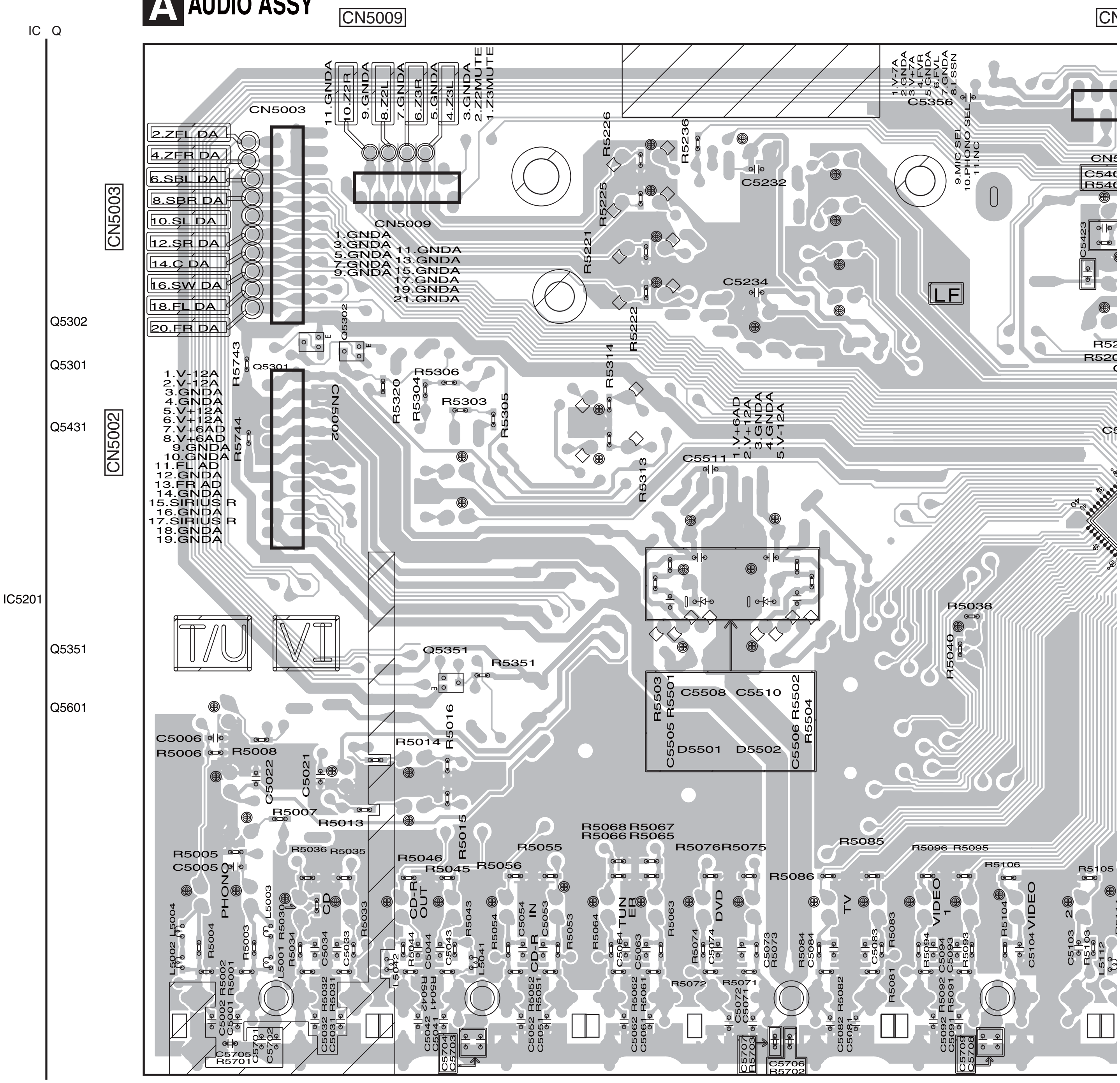
SIDE A


7706
04
S CN5401
F CN7041
CN5009
CN5003
F CN7042
CN5002
CN5004
10.LSSN
11.MIC SEL
12.PHONO SEL
13.NC
1.V-7A
2.GNDA
3.V+7A
4.FVR
5.GNDA
6.FVL
7.GNDA
8.MICOUT
9.GNDA
11.GNDA
10.Z2R
9.GNDA
8.Z2L
7.GNDA
6.Z3R
5.GNDA
4.Z3L
3.GNDA
2.Z3MUTE
1.Z2MUTE
1.GNDA
2.ZFL DA
3.GNDA
4.ZFR DA
5.GNDA
6.SBL DA
7.GNDA
8.SBR DA
9.GNDA
10.SL DA
11.GNDA
12.SR DA
13.GNDA
14.C DA
15.GNDA
16.SW DA
17.GNDA
18.FL DA
19.GNDA
20.FR DA
21.GNDA
1.V-12A
2.V-12A
3.GNDA
4.GNDA
5.V+12A
6.V+12A
7.V+6AD
8.V+6AD
9.GNDA
10.GNDA
11.FL AD
12.GNDA
13.FR AD
14.GNDA
15.SIRIUS R
16.GNDA
17.SIRIUS L
18.GNDA
19.GNDA
1.V+6AD
2.V+12A
3.GNDA
4.GNDA
5.V-12A
JP5001
C5357
JH5001
LF
C5411
C5424
C5412
C5226
C5225
C5221
C5222
C5231
R5235
C5235
C5227
C5236
C5228
C5223
C5224
C5233
IC5221
R5310 R5308
R5312 C5304 R5302
C5305
C5306
IC5302
R5301
R5311 C5303
R5309 R5307
C5301
D5302 C5308
C5302
IC5301
C5208
C5207
D5301
C5307
R5203
[[G]]
A30C5/C7
C5509
C5507
C5502
C5501
Q5501
Q5502
C5504
C5503
C5038
ICT FC
IC5351
C5352
C5351
C5012
R5010
C5010
IC5001
R5009
C5009
C5011
C5018
R5012
C5014
C5016
C5019
C5017
C5008
C5020
C5007
R5011
C5013
C5015
T/U
VI
C5105
C5106
C5086
C5075
R5101
C5101
R5102
C5102
C5095
C5096
C5085
C5076
C5065
C5066
C5055
C5056
C5045
C5046
C5035
C5036
C5003
C5004
JA5005
JA5004 : 4PIN
JA5003 : 6PIN
JA5002
JA5001

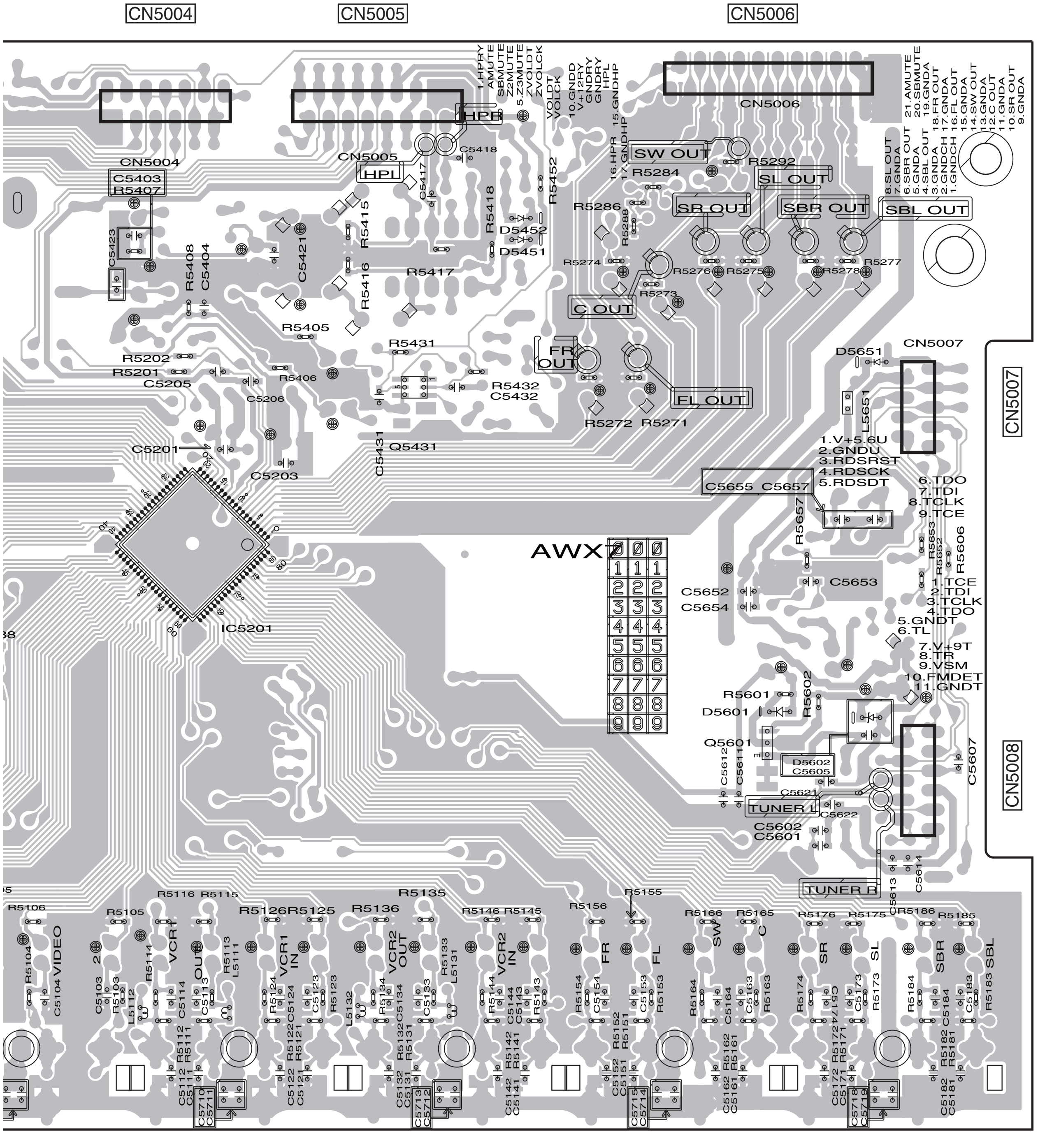
(ANP7650-D)

SIDE B

A AUDIO ASSY


CN5009
IC Q
Q5302
Q5301
Q5431
IC5201
Q5351
Q5601
CN5003
CN5002
2.ZFL DA
4.ZFR DA
6.SBL DA
8.SBR DA
10.SL DA
12.SR DA
14.C DA
16.SW DA
18.FL DA
20.FR DA
11.GNDA
10.Z2R
9.GNDA
8.Z2L
7.GNDA
6.Z3R
5.GNDA
4.Z3L
3.GNDA
2.Z2MUTE
1.Z3MUTE
1.GNDA
3.GNDA
5.GNDA
7.GNDA
9.GNDA
11.GNDA
13.GNDA
15.GNDA
17.GNDA
19.GNDA
21.GNDA
1.V-12A
2.V-12A
3.GNDA
4.GNDA
5.V+12A
6.V+12A
7.V+6AD
8.V+6AD
9.GNDA
10.GNDA
11.FL AD
12.GNDA
13.FR AD
14.GNDA
15.SIRIUS R
16.GNDA
17.SIRIUS R
18.GNDA
19.GNDA
1.V+6AD
2.V+12A
3.GNDA
4.GNDA
5.V-12A
1.V-7A
2.GNDA
3.V+7A
4.FVR
5.GNDA
6.FVL
7.GNDA
8.LSSN
9.MIC SEL
10.PHONO SEL
11.NC
C5356
R5226
R5236
R5225
R5221
R5222
C5232
C5234
LF
C5423
R5743
R5744
R5314
R5313
R5306
R5320
R5304
R5303
R5305
C5511
T/U
VI
Q5351
R5351
R5038
R5040
R5503
R5501
C5508
C5510
R5502
R5504
C5505
D5501
D5502
C5506
C5006
R5006
R5008
C5022
C5021
R5014
R5016
R5007
R5013
R5015
R5005
C5005
R5036
R5035
R5046
R5045
R5056
R5055
R5068
R5067
R5066
R5065
R5076
R5075
R5085
R5086
R5096
R5095
R5106
R5105
PHONO
CD
CD-R OUT
CD-R IN
TUNER
DVD
TV
VIDEO 1
VIDEO 2
C5705
R5701
C5701
C5702
C5704
C5703
C5707
R5703
C5706
R5702
C5709
C5708

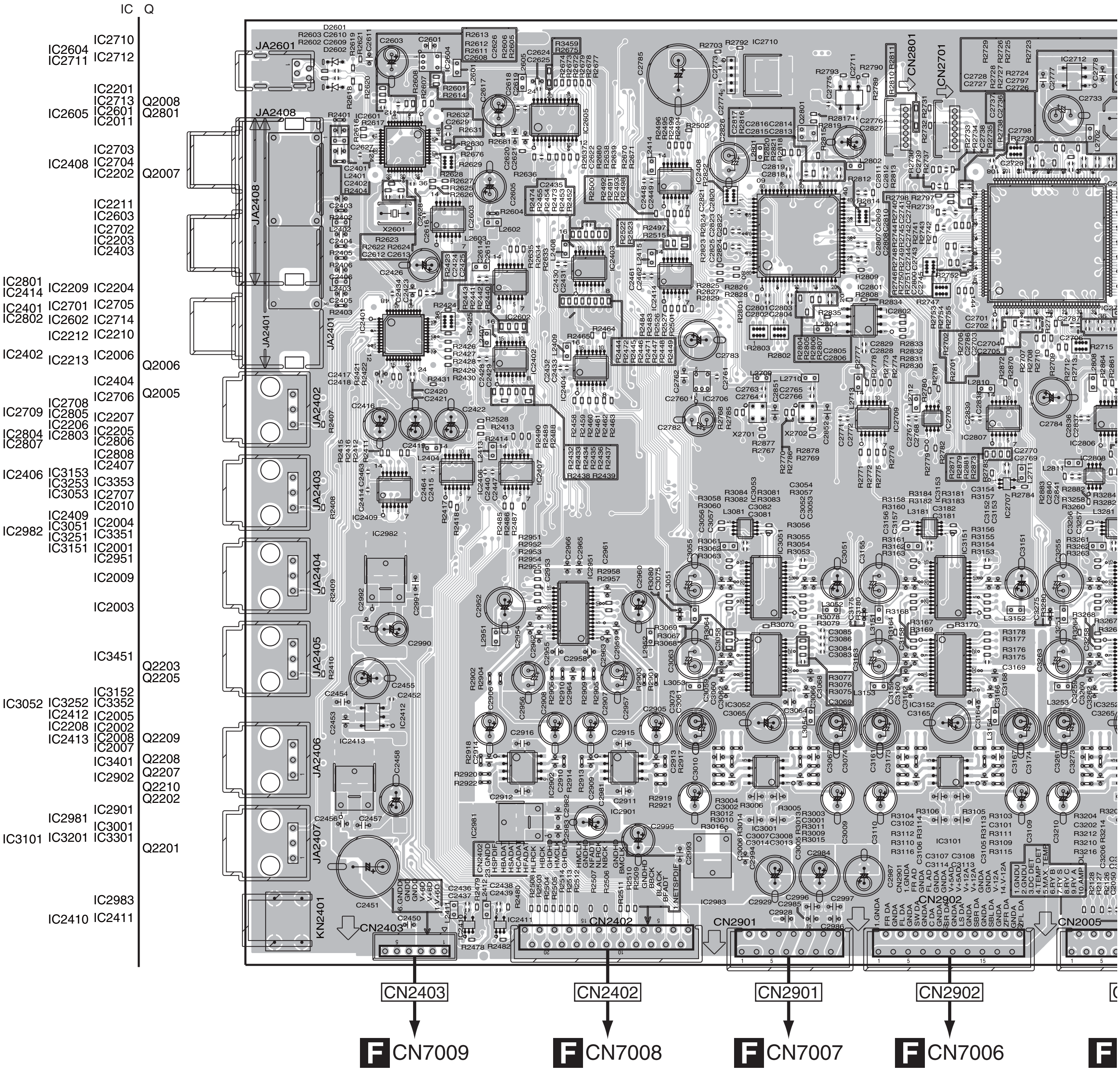
SIDE B


CN5004
CN5005
CN5006
CN5007
CN5008
1.HPRY
AMUTE
SBMUTE
Z2MUTE
5.Z3MUTE
ZVOLDT
ZVOLCK
VOLDT
VOLCK
10.GNDD
V+12RY
GNDRY
GNDRY
HPL
15.GNDHP
16.HPR
17.GNDHP
21.AMUTE
20.SBMUTE
19.GNDA
18.FR OUT
17.GNDA
16.FL OUT
15.GNDA
14.SW OUT
13.GNDA
12.C OUT
11.GNDA
10.SR OUT
9.GNDA
8.SL OUT
7.GNDA
6.SBR OUT
5.GNDA
4.SBL OUT
3.GNDA
2.GNDCH
1.GNDCH
HPR
HPL
C5418
C5417
C5403
R5407
C5423
R5408
C5404
C5421
R5415
R5416
R5417
R5418
R5452
D5452
D5451
SW OUT
R5292
R5284
SL OUT
R5286
R5288
SR OUT
SBR OUT
SBL OUT
R5274
R5276
R5275
R5278
R5277
R5273
C OUT
R5405
R5431
R5202
R5201
C5205
R5406
C5206
FR OUT
R5432
C5432
FL OUT
R5272
R5271
D5651
L5651
C5201
C5203
C5431
Q5431
1.V+5.6U
2.GNDU
3.RDSRST
4.RDSCK
5.RDSDT
C5655
C5657
6.TDO
7.TDI
8.TCLK
9.TCE
R5657
R5653
R5652
R5606
AWX7
C5653
C5652
C5654
1.TCE
2.TDI
3.TCLK
4.TDO
5.GNDT
6.TL
7.V+9T
8.TR
9.VSM
10.FMDET
11.GNDT
IC5201
R5601
R5602
D5601
Q5601
D5602
C5605
C5612
C5611
C5621
C5622
TUNER L
C5602
C5601
C5607
C5613
C5614
TUNER R
R5106
R5105
R5116
R5115
R5126
R5125
R5135
R5136
R5146
R5145
R5156
R5155
R5166
R5165
R5176
R5175
R5186
R5185
VIDEO
VCR1 OUT
VCR1 IN
VCR2 OUT
VCR2 IN
FR
FL
SW
C
SR
SL
SBR
SBL
R5104
C5104
C5103
R5103
L5112
R5114
C5114
C5113
R5113
L5111
R5112
R5111
C5112
C5111
C5710
C5711
R5124
C5124
C5123
R5123
R5122
R5121
C5122
C5121
L5132
R5134
C5134
C5133
R5133
L5131
R5132
R5131
C5132
C5131
C5713
C5712
R5144
C5144
C5143
R5143
R5142
R5141
C5142
C5141
R5154
C5154
C5153
R5153
R5152
R5151
C5152
C5151
C5715
C5714
R5164
C5164
C5163
R5163
R5162
R5161
C5162
C5161
R5174
C5174
C5173
R5173
R5172
R5171
C5172
C5171
C5718
C5719
R5184
C5184
C5183
R5183
R5182
R5181
C5182
C5181

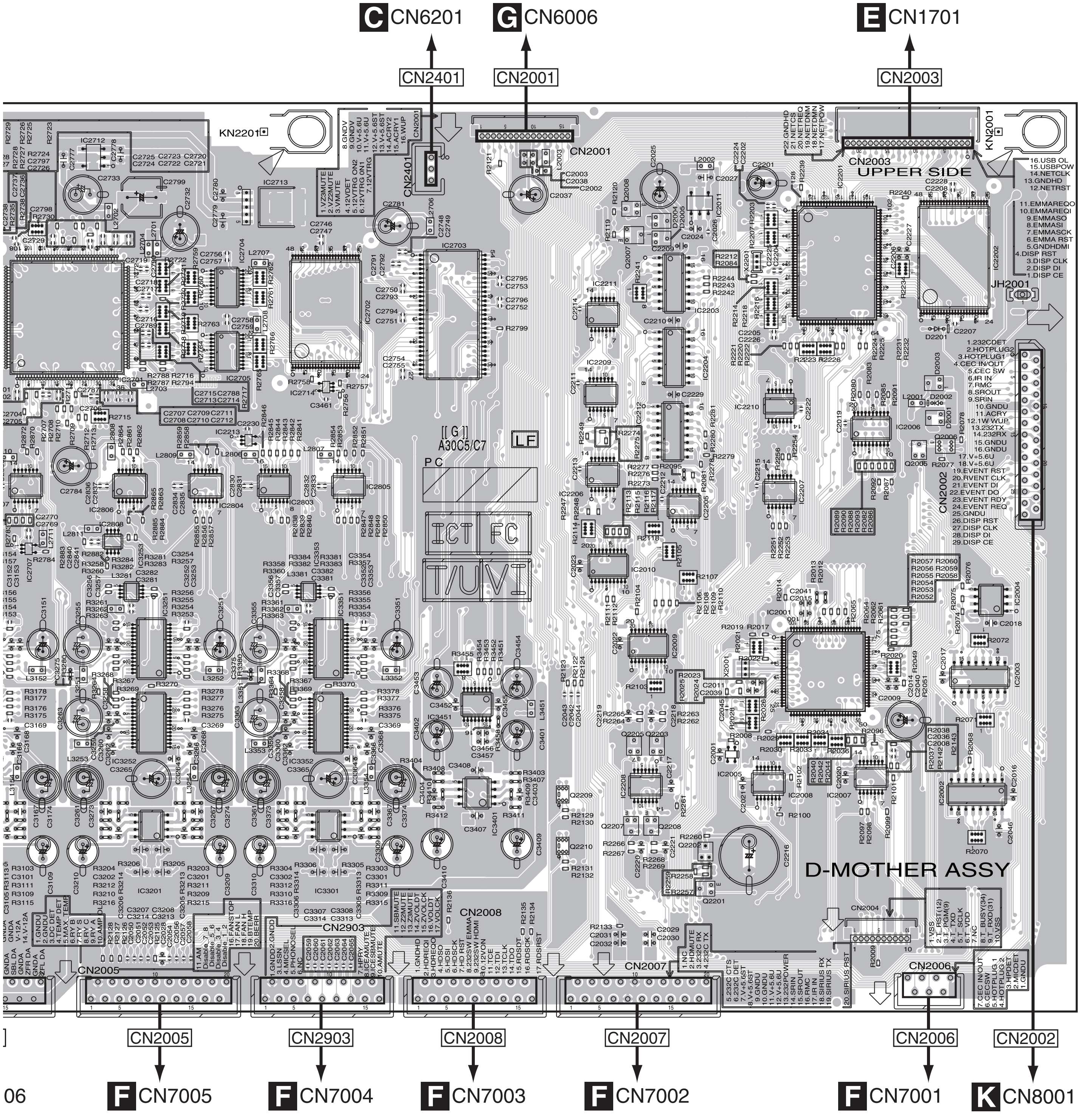
(ANP7650-D)

11.2 D-MOTHER ASSY

SIDE A


B D-MOTHER ASSY
IC Q
IC2710
IC2604 IC2712
IC2711
IC2201
IC2713 Q2008
IC2605 IC2601 Q2801
IC2011
IC2703
IC2408 IC2704
IC2202 Q2007
IC2211
IC2603
IC2702
IC2203
IC2403
IC2801
IC2414 IC2209 IC2204
IC2401 IC2701 IC2705
IC2802 IC2602 IC2714
IC2212 IC2210
IC2402 IC2213 IC2006
Q2006
IC2404
IC2706 Q2005
IC2708
IC2709 IC2805 IC2207
IC2206
IC2804 IC2803 IC2205
IC2807 IC2806
IC2808
IC2407
IC2406 IC3153 IC3353
IC3253
IC3053 IC2707
IC2010
IC2409
IC2982 IC3051 IC2004
IC3251 IC3351
IC3151 IC2001
IC2951
IC2009
IC2003
IC3451
Q2203
Q2205
IC3152
IC3052 IC3252 IC3352
IC2412 IC2005
IC2208 IC2002
IC2413 IC2008 Q2209
IC2007
IC3401 Q2208
IC2902 Q2207
Q2210
Q2202
IC2901
IC2981
IC3001
IC3101 IC3201 IC3301 Q2201
IC2983
IC2410 IC2411
JA2601
JA2408
JA2401
JA2402
JA2403
JA2404
JA2405
JA2406
JA2407
KN2401
CN2801
CN2701
CN2403
CN2402
CN2901
CN2902
CN2005
CN2403
CN2402
CN2901
CN2902
F CN7009
F CN7008
F CN7007
F CN7006
F

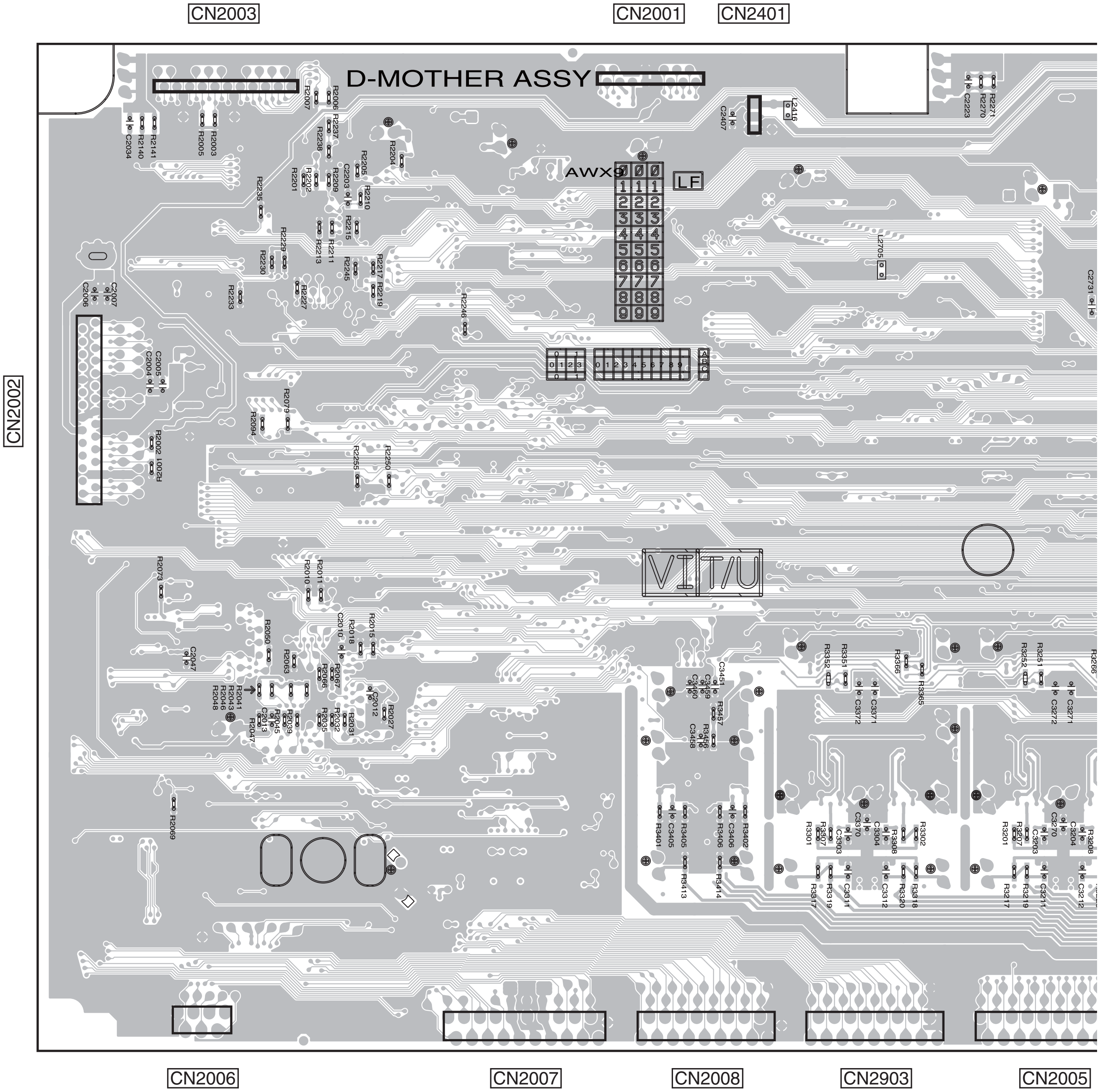
SIDE A


C CN6201
G CN6006
E CN1701
CN2401
CN2001
CN2003
KN2201
KN2001
UPPER SIDE
JH2001
[[G]]
A30C5/C7
LF
PC
ICT
FC
T/UVI
D-MOTHER ASSY
CN2005
CN2903
CN2008
CN2007
CN2004
CN2006
CN2002
F CN7005
F CN7004
F CN7003
F CN7002
F CN7001
K CN8001
06

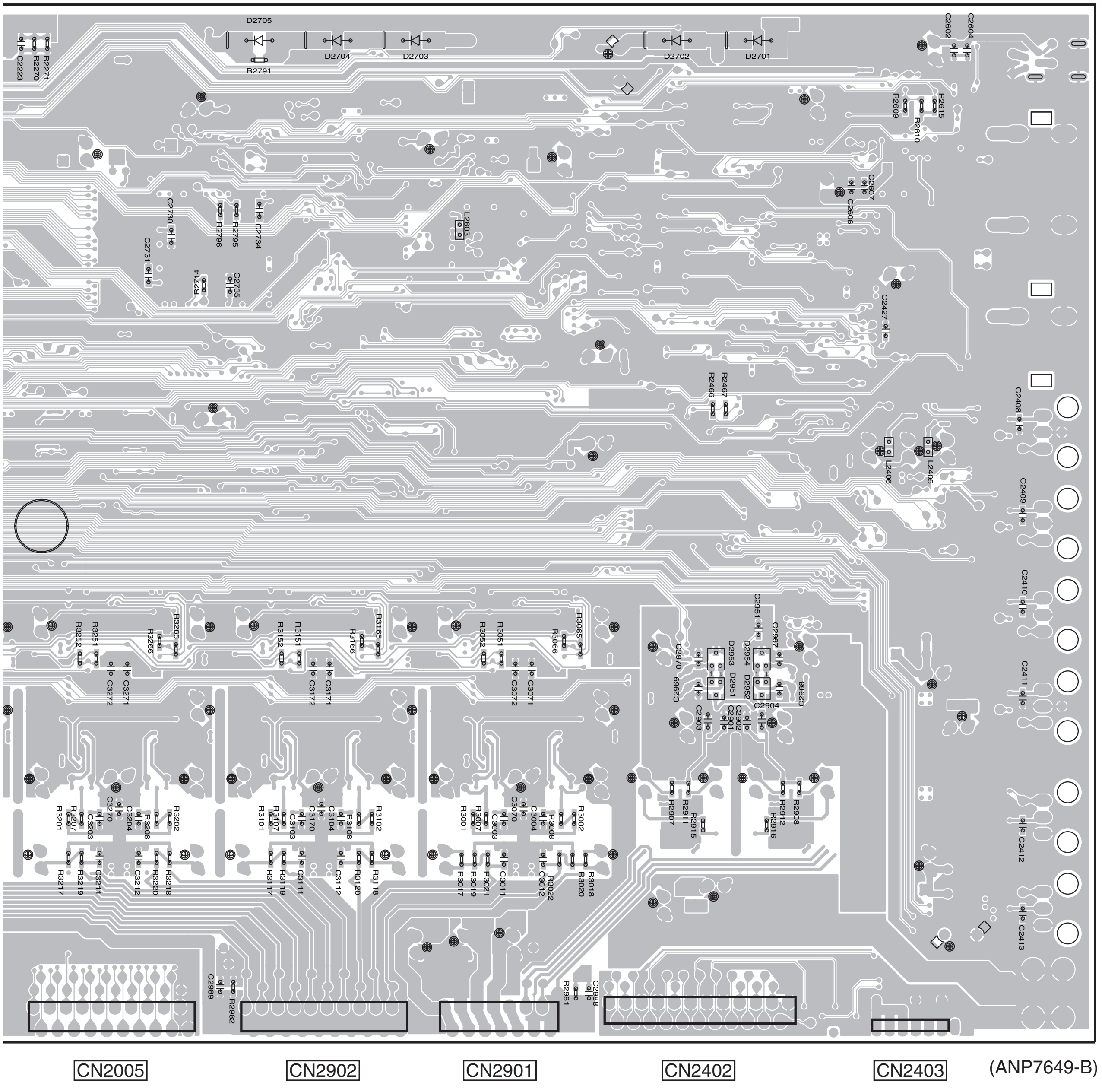
(ANP7649-B)

SIDE B

B D-MOTHER ASSY


CN2003
CN2001
CN2401
D-MOTHER ASSY
AWX9
LF
VI T/U
CN2002
CN2006
CN2007
CN2008
CN2903
CN2005
R2141
R2140
C2034
R2003
R2005
R2007
R2006
R2237
R2238
R2204
R2205
C2203
R2209
R2202
R2201
R2210
R2235
R2215
R2211
R2213
R2229
R2230
R2245
R2217
R2219
R2227
R2233
R2246
C2407
R2416
C2223
R2270
R2271
L2705
C2731
C2007
C2006
C2005
C2004
R2079
R2094
R2002
R2001
R2255
R2250
R2073
R2011
R2010
R2015
R2018
C2016
R2050
R2063
C2047
R2066
R2067
R2041
R2043
R2046
R2048
C2013
R2047
R2045
R2039
R2035
R2032
R2031
C2012
R2027
R2069
C3451
C3459
C3460
R3457
C3458
R3456
C3401
C3405
R3405
R3406
C3406
R3402
R3413
R3414
R3352
R3351
C3372
C3371
R3366
R3365
R3301
R3307
C3303
C3370
C3304
R3308
R3302
R3317
R3319
C3311
C3312
R3320
R3318
R3252
R3251
C3272
C3271
R3266
R3201
R3207
C3203
C3270
C3204
R3208
R3217
R3219
C3211
C3212

SIDE B

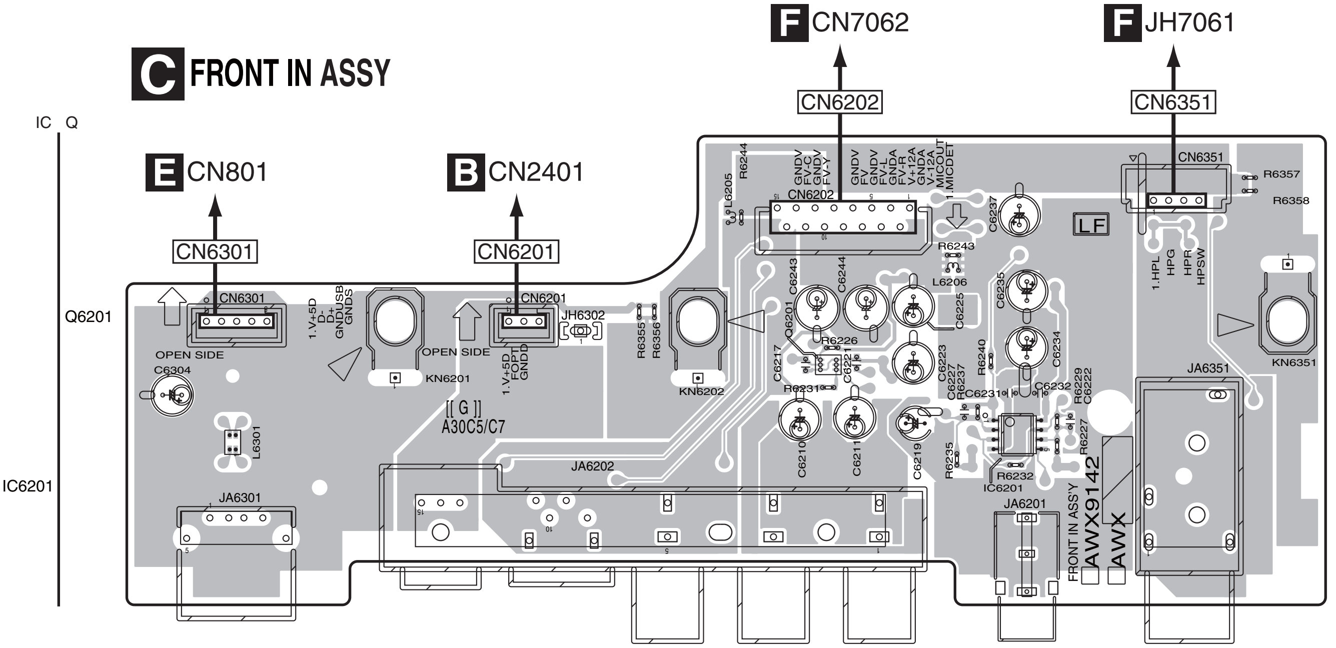


D2705
D2704
D2703
D2702
D2701
R2791
R2271
R2270
C2223
C2602
C2604
R2615
R2609
R2610
C2607
C2606
L2902
C2730
C2731
R2796
R2795
C2734
R2714
C2735
C2427
R2467
R2466
C2408
L2406
L2405
C2409
C2410
C2411
C2412
C2413
C2951
C2967
C2970
C2969
D2953
D2954
D2951
D2952
C2968
C2903
C2902
C2901
C2904
R2907
R2911
R2915
R2908
R2912
R2916
R3265
R3251
R3252
R3266
C3271
C3272
R3165
R3151
R3152
R3166
C3171
C3172
R3065
R3051
R3052
R3066
C3071
C3072
R3201
R3207
C3270
C3203
C3204
R3208
R3202
R3217
R3219
C3211
C3212
R3220
R3218
R3101
R3107
C3103
C3170
C3104
R3108
R3102
R3117
R3119
C3111
C3112
R3120
R3118
R3001
R3007
C3003
C3070
C3004
R3008
R3002
R3017
R3019
R3021
C3011
C3012
R3022
R3018
R3020
C2989
R2982
R2981
C2988
CN2005
CN2902
CN2901
CN2402
CN2403

(ANP7649-B)

11.3 FRONT IN ASSY

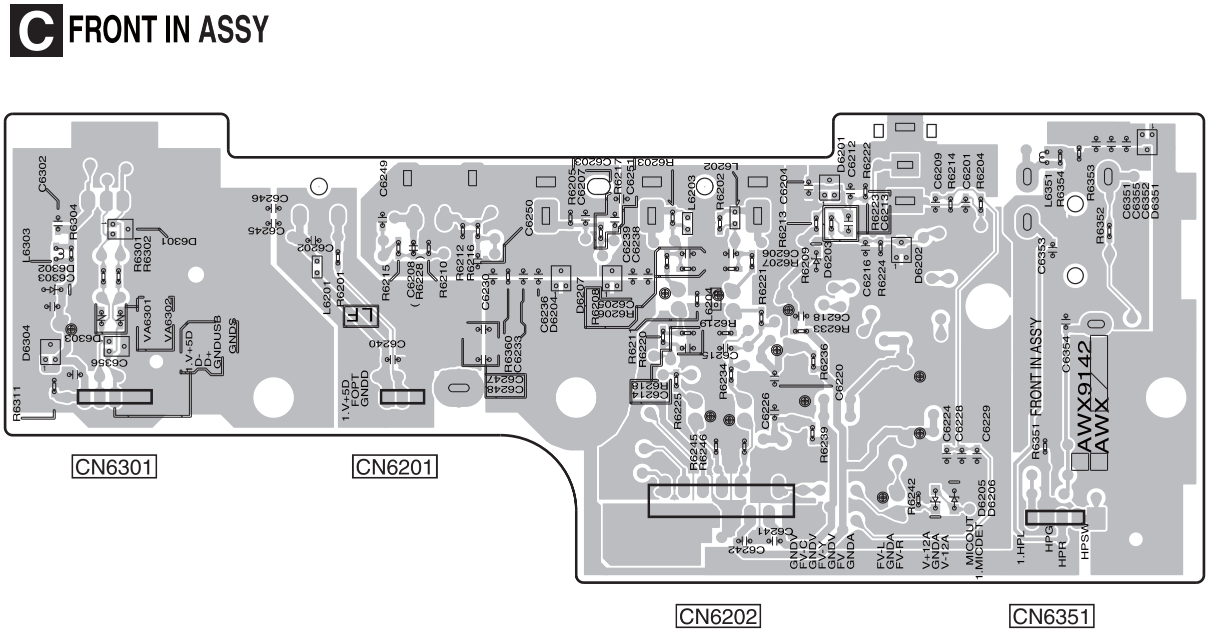
SIDE A **SIDE A**



C FRONT IN ASSY
F CN7062
F JH7061
CN6202
CN6351
E CN801
B CN2401
CN6301
CN6201
IC Q
Q6201
IC6201
CN6301
OPEN SIDE
C6304
L6301
JA6301
1.V+5D D+ D- GNDUSB GNDS
KN6201
CN6201
JH6302
OPEN SIDE
1.V+5D FOPT GNDD
[[G]] A30C5/C7
R6355 R6356
KN6202
JA6202
R6244 L6205
CN6202
GNDV FV-C GNDV FV-Y GNDV FV GNDV FV-L GNDA FV-R V+12A GNDA V-12A MICOUT 1.MICDET
R6243 L6206
C6237
C6243 C6244 C6225 C6235 C6234
Q6201 R6226 C6217 C6221 R6231
C6223 C6227 R6237 R6240 C6231 C6232 R6229 C6222
C6210 C6211 C6219 R6235 R6232 IC6201 R6227
JA6201
FRONT IN ASS'Y AWX9142 AWX
LF
CN6351 R6357 R6358
1.HPL HPG HPR HPSW
KN6351
JA6351

(ANP7651-B)

SIDE B **SIDE B**



C FRONT IN ASSY
C6302 C6303 R6304 R6301 R6302 D6301 D6302 C6303 D6304 D6303 VA6301 VA6302 C6356 R6311
1.V+5D D+ D- GNDUSB GNDS
C6246 C6245 C6202 R6201 L6201 LF C6240
1.V+5D FOPT GNDD
C6249 R6215 C6208 R6228 R6212 R6216 R6210 C6250 C6230 R6260 C6233 C6247 C6248
C6236 D6204 D6207 R6205 C6207 C6203 R6217 C6251 R6203 C6239 C6238 R6208 C6206 R6206
L6203 L6202 R6202 C6204 R6213 R6207 D6206 R6221 D6201 C6212 R6222 D6203 R6223 C6213
R6211 R6220 R6218 R6214 C6214 R6225 R6234 C6215 R6219 C6218 R6233 R6236 C6220
C6216 R6224 D6202 C6209 R6214 C6201 R6204
R6245 R6246 C6226 R6239 R6242 C6224 C6228 C6229 D6205 D6206
C6241 C6242
GNDV FV-C GNDV FV-Y GNDV FV GNDA FV-L GNDA FV-R V+12A GNDA V-12A MICOUT 1.MICDET
L6351 R6354 R6353 R6352 C6351 C6355 C6352 D6351 C6353 C6354 R6351
FRONT IN ASS'Y AWX9142 AWX
1.HPL HPG HPR HPSW
CN6301
CN6201
CN6202
CN6351

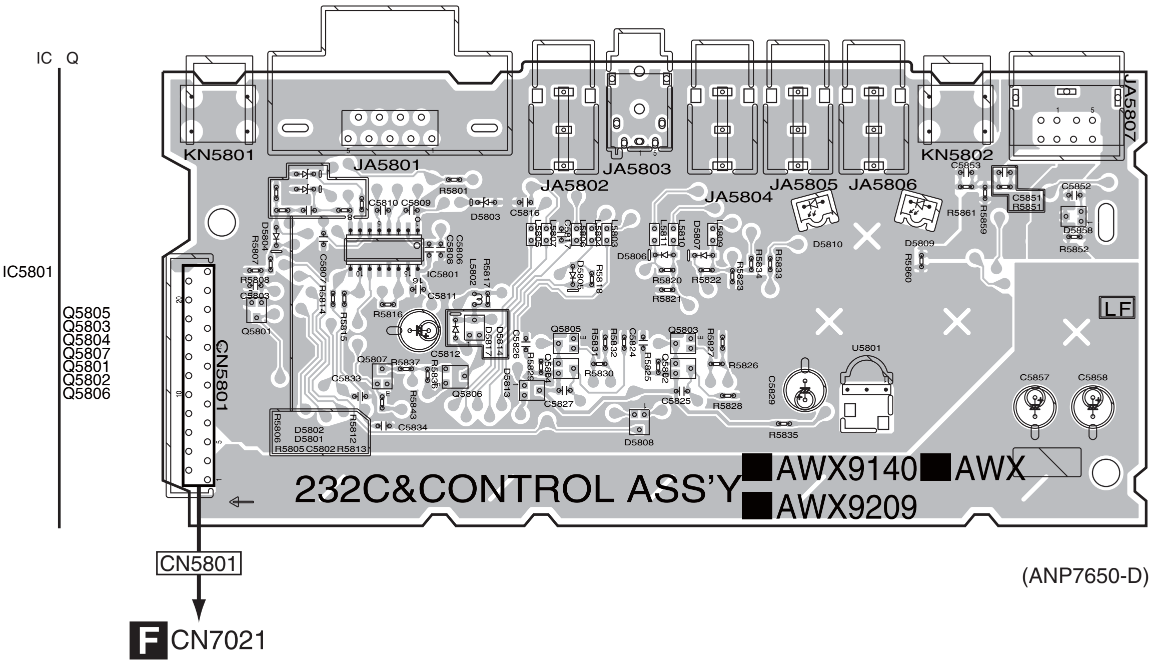
(ANP7651-B)

11.4 232C & CONTROL ASSY

SIDE A

SIDE A

D 232C & CONTROL ASSY

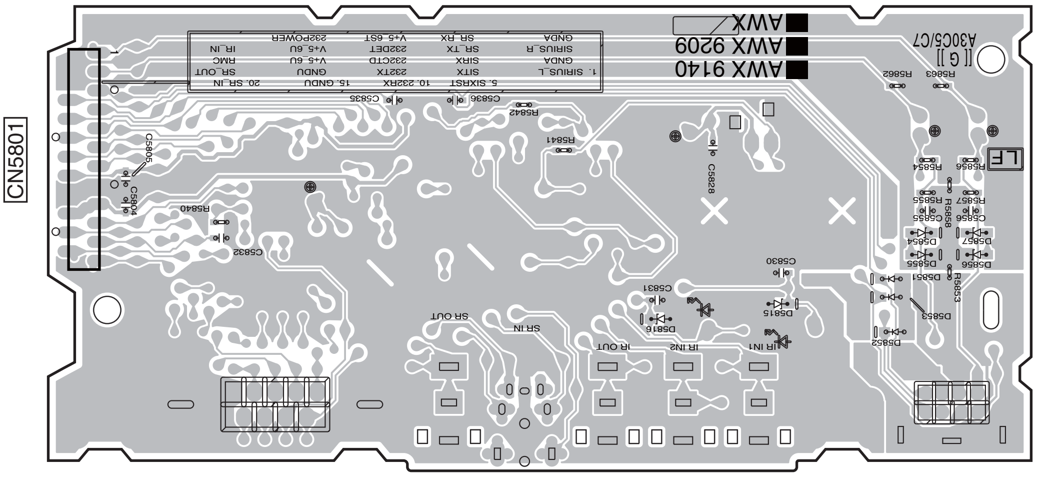

IC
Q
IC5801
Q5805
Q5803
Q5804
Q5807
Q5801
Q5802
Q5806
KN5801
JA5801
JA5802
JA5803
JA5804
JA5805
JA5806
KN5802
JA5807
CN5801
U5801
LF
232C&CONTROL ASS'Y
AWX9140
AWX
AWX9209
CN5801
F CN7021

(ANP7650-D)

SIDE B

SIDE B

D 232C & CONTROL ASSY

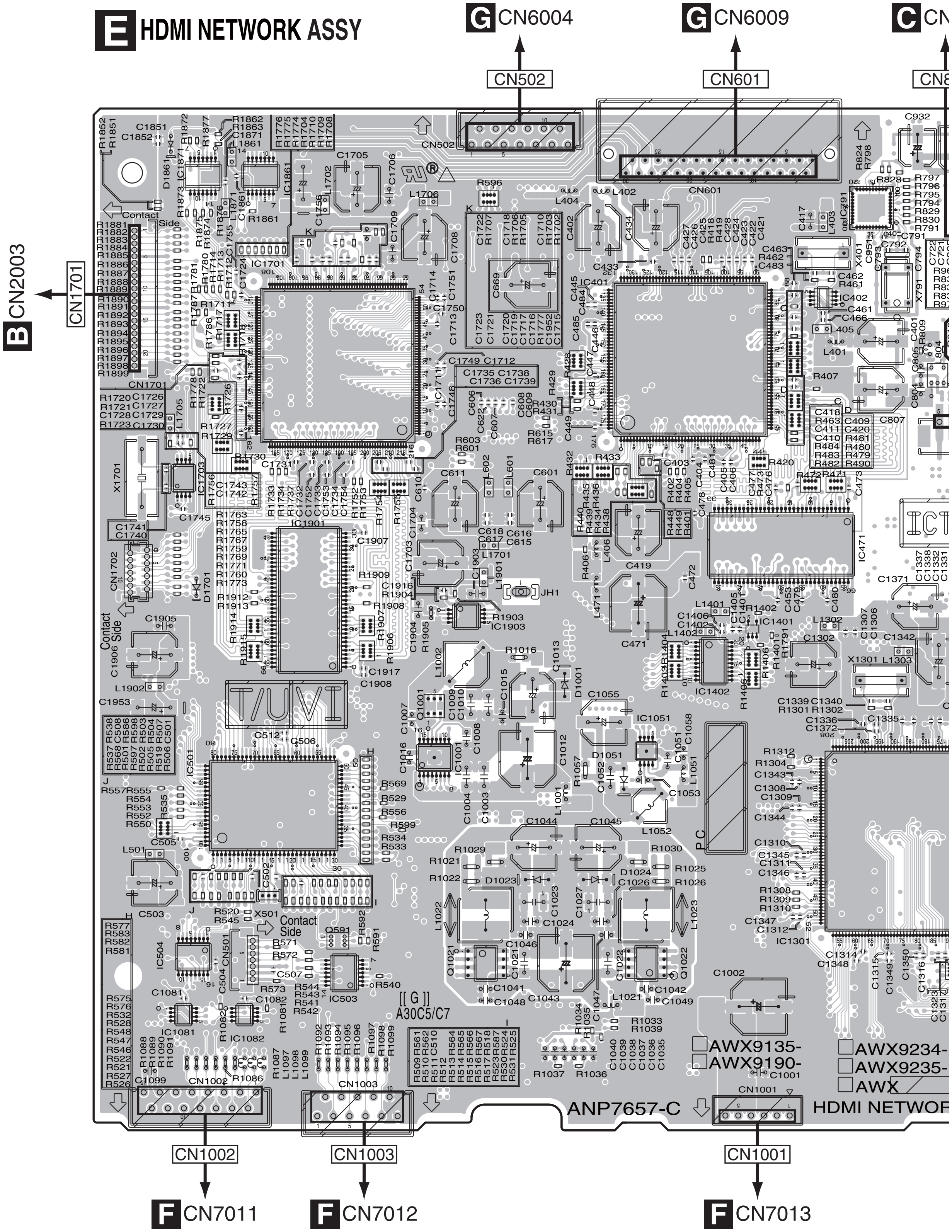

CN5801
AWX
AWX 9209
AWX 9140
A30C5/C7
[[G]]
LF
SR OUT
SR IN
IR OUT
IR IN2
IR IN1
1. SIRIUS_L
5. SIXRST
10. 232RX
15. GNDU
20. SR_IN
SIRIUS_R
GNDA
SIRX
SITX
232CTD
232TX
232DET
V+5_6U
GNDU
RMC
SR_OUT
SR_RX
SR_TX
V+5_6ST
232POWER
IR_IN

(ANP7650-D)

11.5 HDMI NETWORK ASSY

SIDE A

IC Q
IC881
IC1871
IC701
IC1861
IC791
IC1701
IC401
IC402
IC801
IC1703
IC1151
IC1901
IC471
IC1401
IC1903
IC101
IC1402 Q1001
IC1051
IC1001
IC501
IC301
IC207
IC206
IC203
Q391
IC202 Q591
IC1301
IC504 Q1021 Q1022
IC281
IC503 Q1281
IC1081
IC252
IC1082
IC351

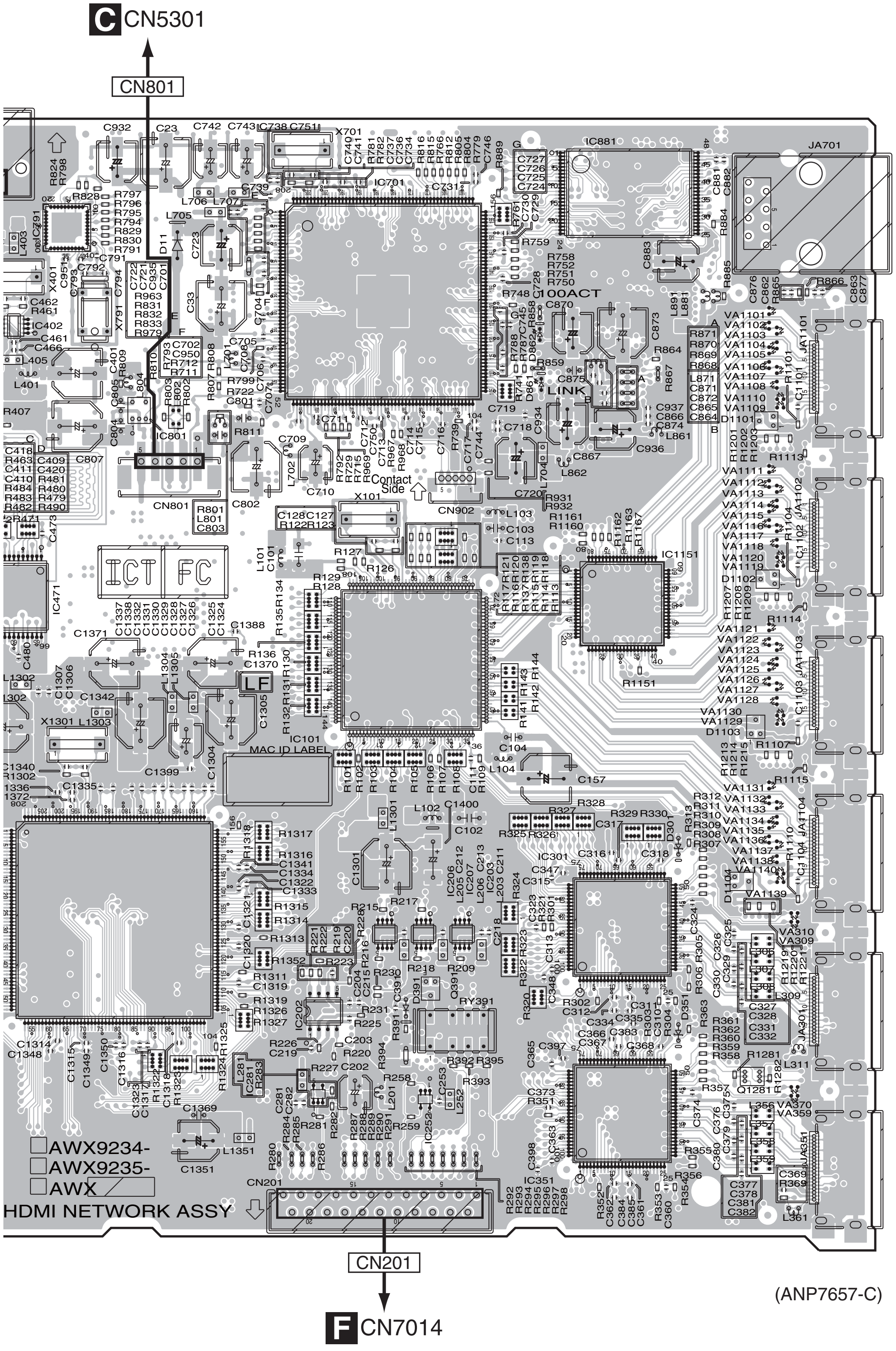


E HDMI NETWORK ASSY
G CN6004
CN502
G CN6009
CN601
C CN
CN8
B CN2003
CN1701
Contact Side
IC1701
IC401
IC1901
IC501
IC1903
IC1051
IC1401
IC1402
IC1301
IC471
T/UVI
[[G]]
A30C5/C7
AWX9135-
AWX9190-
AWX9234-
AWX9235-
AWX
ANP7657-C
HDMI NETWOR
CN1002
F CN7011
CN1003
F CN7012
CN1001
F CN7013

SIDE A

A

B


C CN5301
CN801
IC801
IC701
IC881
JA701
100ACT
LINK
Contact Side
CN902
X101
IC1151
IC101
MAC ID LABEL
ICT
FC
LF
IC471
IC301
RY391
JA1101
JA1102
JA1103
JA1104
JA301
JA351
CN201
AWX9234-
AWX9235-
AWX
HDMI NETWORK ASSY
F CN7014

(ANP7657-C)

C

D

E

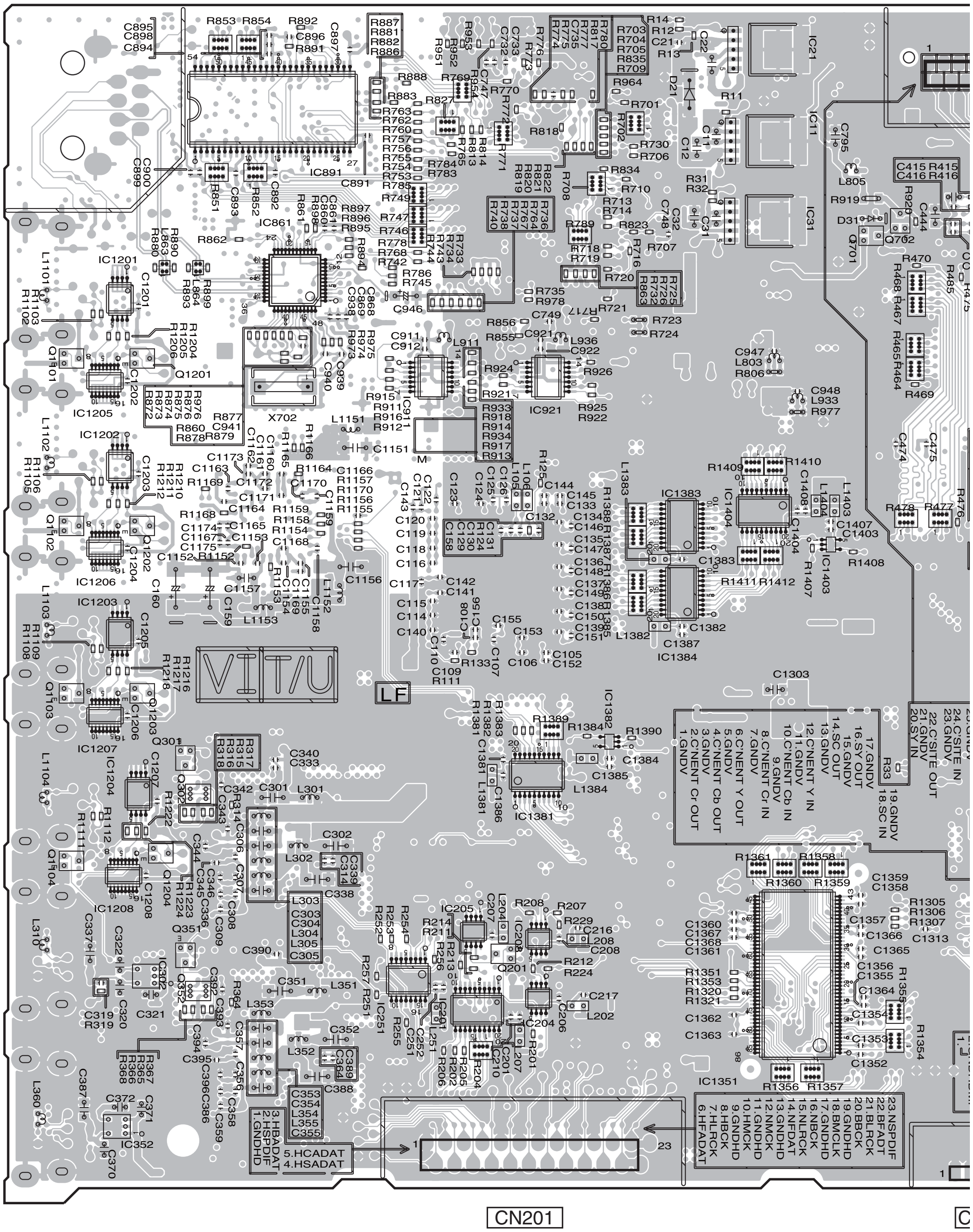
F

SIDE B

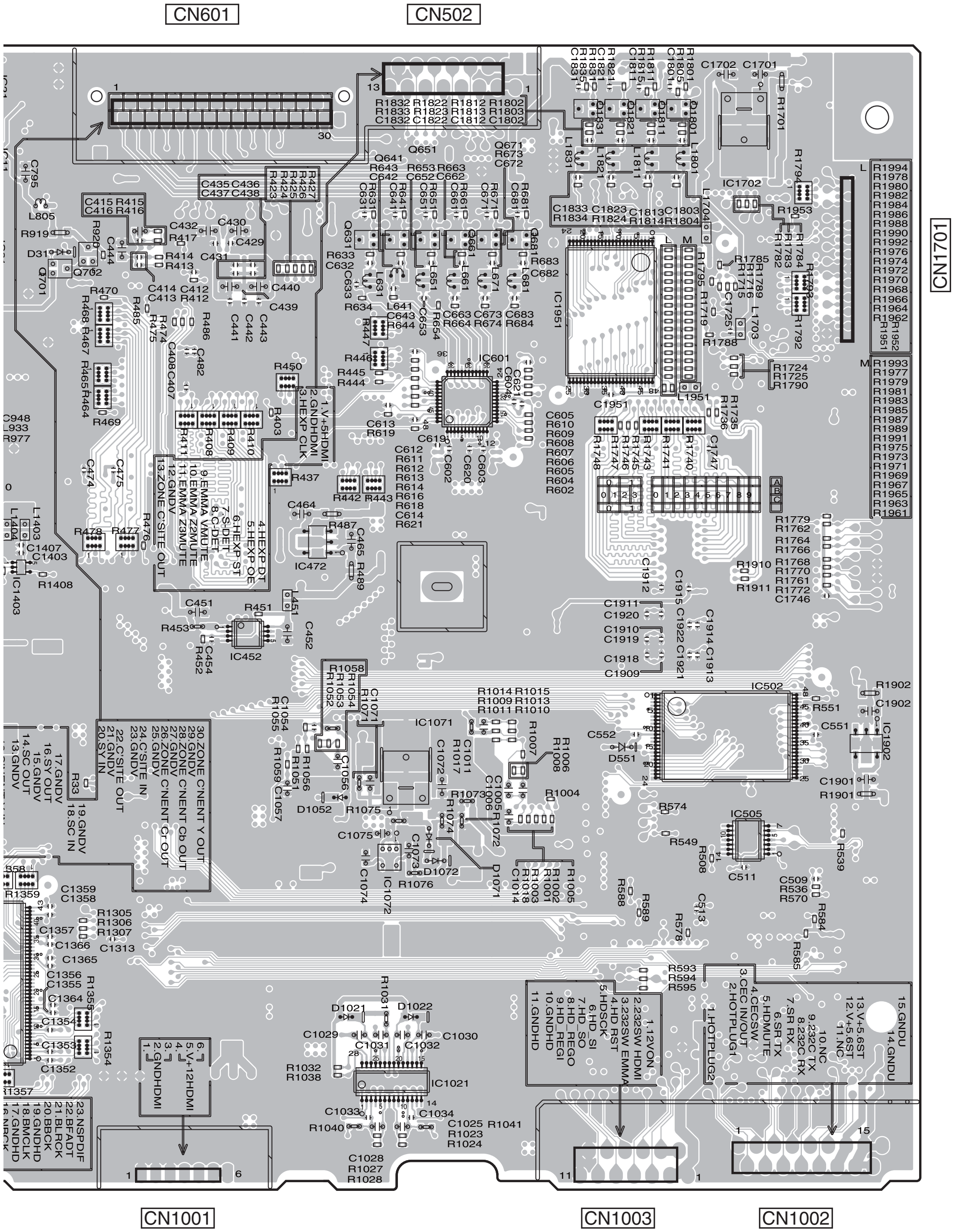
E HDMI NETWORK ASSY

IC Q

IC21
Q1831 Q1821
Q1801 Q1811
Q651 Q671
IC11 Q641
IC1702
IC891
Q631
Q661 Q681
IC861 IC31
Q702
Q701
IC1201
IC1951
IC601
Q1101
Q1201
IC921
IC1205 IC911
IC1202
IC1383
IC1404
IC472 Q1102
Q1202
IC1206 IC1403
IC1203
IC452
IC1384
IC502
IC1071 Q1103
IC1382 Q1203
IC1902
IC1207 Q301
IC1204 Q302
IC505
IC1381
IC1072 Q1104
Q1204
IC1208 IC205
IC208 Q351
Q201
IC302 Q352
IC201
IC251 IC204
IC1021
IC1351
IC352


IC21
IC11
IC31
IC891
IC861
IC1201
IC1205
IC1202
IC1206
IC1203
IC1207
IC1204
IC1208
IC921
IC911
IC1383
IC1404
IC1403
IC1384
IC1382
IC1381
IC1351
IC205
IC208
IC201
IC204
IC251
IC302
IC352
X702
LF
VIT/U
17.GNDV
16.SY OUT
15.GNDV
14.SC OUT
13.GNDV
12.C:NENT Y IN
11.GNDV
10.C:NENT Cb IN
9.GNDV
8.C:NENT Cr IN
7.GNDV
6.C:NENT Y OUT
5.GNDV
4.C:NENT Cb OUT
3.GNDV
2.C:NENT Cr OUT
1.GNDV
19.GNDV
18.SC IN
20.SY IN
21.GNDV
22.C:SITE OUT
23.GNDV
24.C:SITE IN
3.HBADAT
2.HSPDIF
1.GNDHD
5.HCADAT
4.HSADAT
23.NSPDIF
22.BFADT
21.BLRCK
20.BBCK
19.GNDHD
18.BMCLK
17.GNDHD
16.NBCK
15.NLRCK
14.NFADT
13.GNDHD
12.NMCK
11.GNDHD
10.HMCK
9.GNDHD
8.HBCK
7.HLRCK
6.HFADAT
CN201

SIDE B

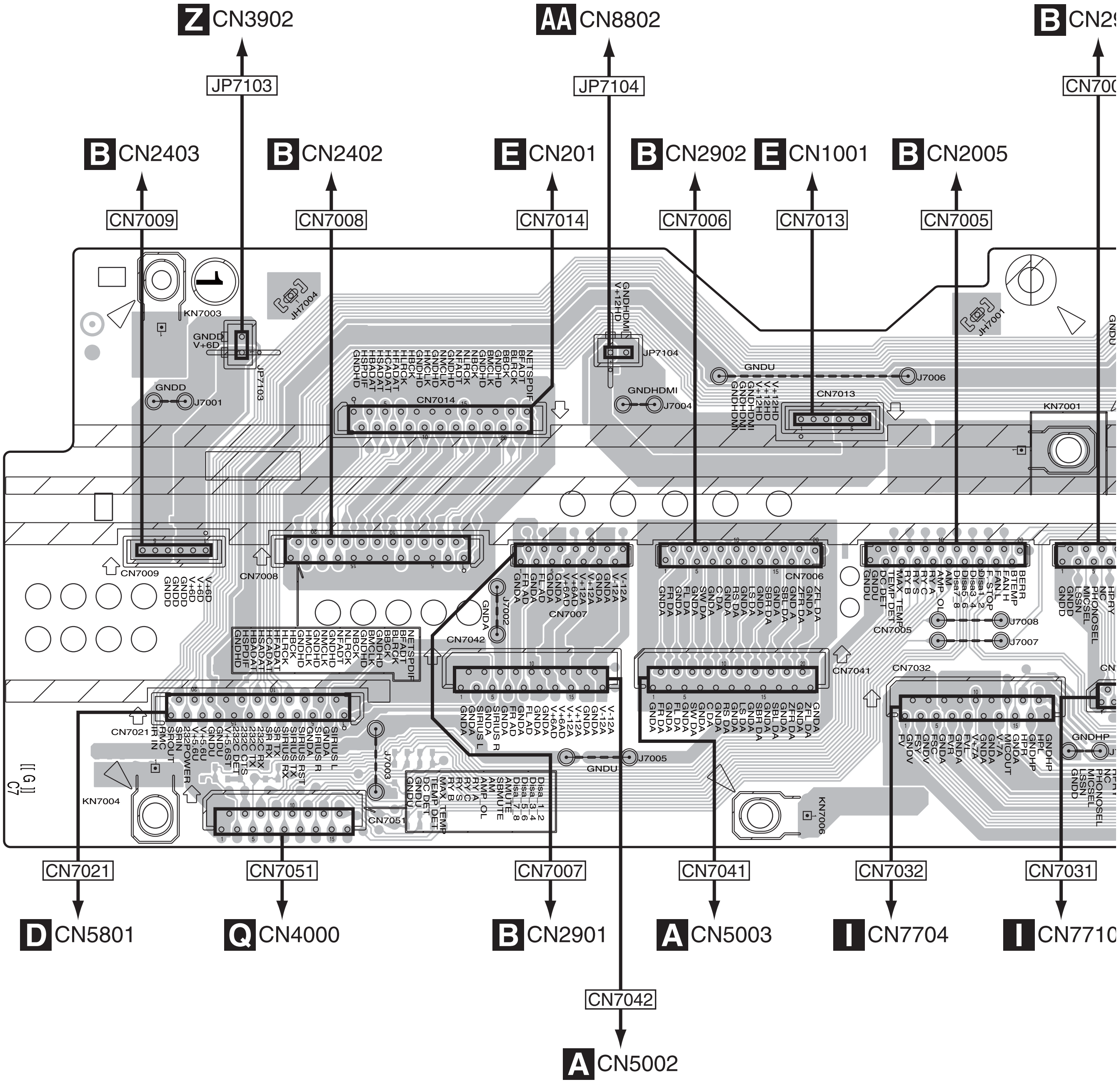

CN601
CN502
CN1701
IC1951
IC601
IC502
IC1071
IC1021
IC505
IC472
IC452
IC1702
IC1902
IC1403
1.V+5HDMI
2.GNDHDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.C-DET
9.EMMA VMUTE
10.EMMA Z2MUTE
11.EMMA Z3MUTE
12.GNDV
13.ZONE C'SITE OUT
13.GNDV
14.SC OUT
15.GNDV
16.SY OUT
17.GNDV
18.SC IN
19.GNDV
20.SY IN
21.GNDV
22.C'SITE OUT
23.GNDV
24.C'SITE IN
25.GNDV
26.ZONE C'NENT Cr OUT
27.GNDV
28.ZONE C'NENT Cb OUT
29.GNDV
30.ZONE C'NENT Y OUT
1.GNDHDMI
5.V+12HDMI
17.GNDHD
18.BMCLK
19.GNDHD
20.BBCK
21.BLRCK
22.BFADT
23.NSPDIF
1.+12VON
2.232SW HDMI
3.232SW EMMA
4.HD RST
5.HDSCK
6.HD_SI
7.HD_SO
8.HD_REGO
9.HD_REGI
10.GNDHD
11.GNDHD
1.HOTPLUG1
2.HOTPLUG2
3.CEC IN/OUT
4.CECSW
5.HDMUTE
6.SR TX
7.SR RX
8.232C TX
9.232C RX
10.NC
11.NC
12.V+5.6ST
13.V+5.6ST
14.GNDU
15.GNDU
CN1001
CN1003
CN1002

(ANP7657-C)

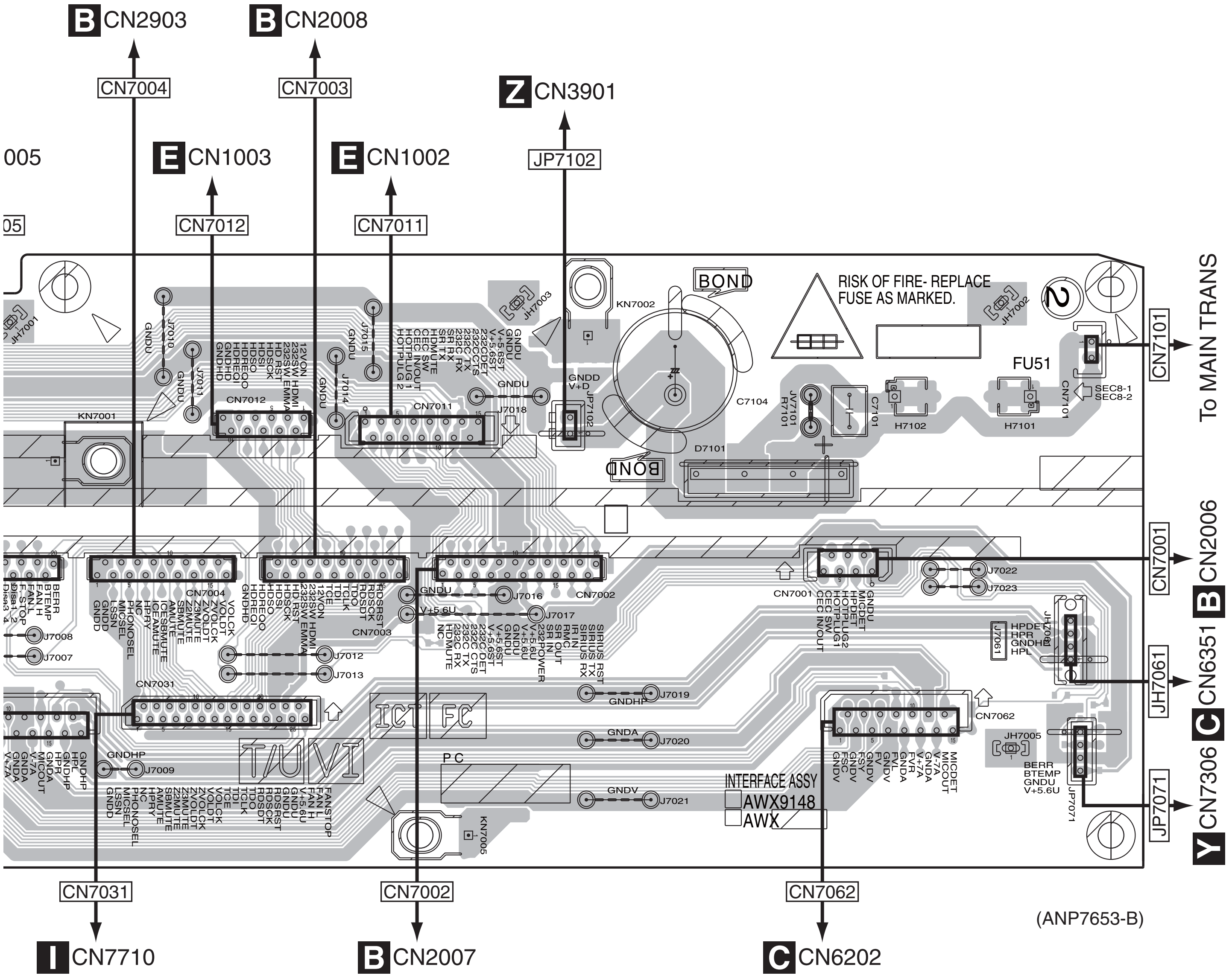
11.6 INTERFACE ASSY

SIDE A

F INTERFACE ASSY


Z CN3902
JP7103
AA CN8802
JP7104
B CN2
CN700
B CN2403
CN7009
B CN2402
CN7008
E CN201
CN7014
B CN2902
CN7006
E CN1001
CN7013
B CN2005
CN7005
KN7003
JH7004
GNDD
V+6D
GNDD
J7001
JP7104
GNDHDMI
J7004
GNDU
J7006
CN7013
KN7001
JH7001
CN7007
CN7042
J7002
CN7041
CN7032
J7008
J7007
CN7021
CN7051
J7003
J7005
GNDU
KN7004
KN7006
GNDHP
CN7021
CN7051
CN7007
CN7041
CN7032
CN7031
D CN5801
Q CN4000
B CN2901
A CN5003
I CN7704
I CN7710
CN7042
A CN5002

SIDE A


B CN2903
B CN2008
CN7004
CN7003
Z CN3901
005
E CN1003
E CN1002
JP7102
05
CN7012
CN7011
BOND
RISK OF FIRE- REPLACE
FUSE AS MARKED.
To MAIN TRANS
CN7101
FU51
KN7002
KN7001
C7104
D7101
H7102
H7101
SEC8-1
SEC8-2
JH7001
JH7002
JH7003
GNDU
V+D
GNDD
J7018
CN7001
CN7002
CN7003
CN7031
CN7062
B CN2006
JH7061
C CN6351
JP7071
Y CN7306
J7016
J7017
J7012
J7013
J7019
J7020
J7021
J7022
J7023
J7007
J7008
J7009
GNDHP
GNDA
GNDV
P C
INTERFACE ASSY
AWX9148
AWX
KN7005
JH7005
BERR
BTEMP
GNDU
V+5.6U
HPDET
HPR
GNDHP
HPL
CN7031
CN7002
CN7062
I CN7710
B CN2007
C CN6202

(ANP7653-B)

F

SIDE B

A

B

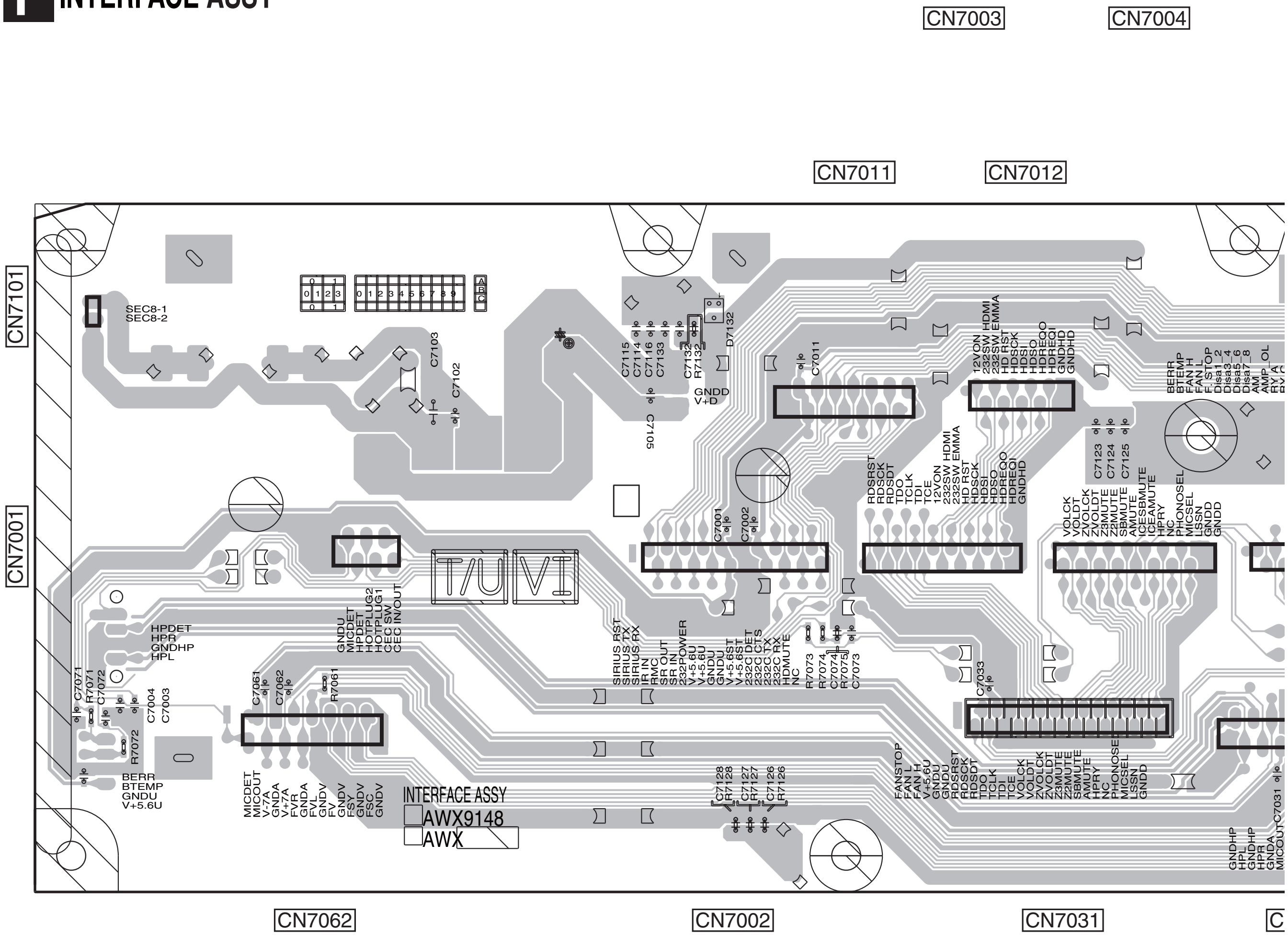
C

D

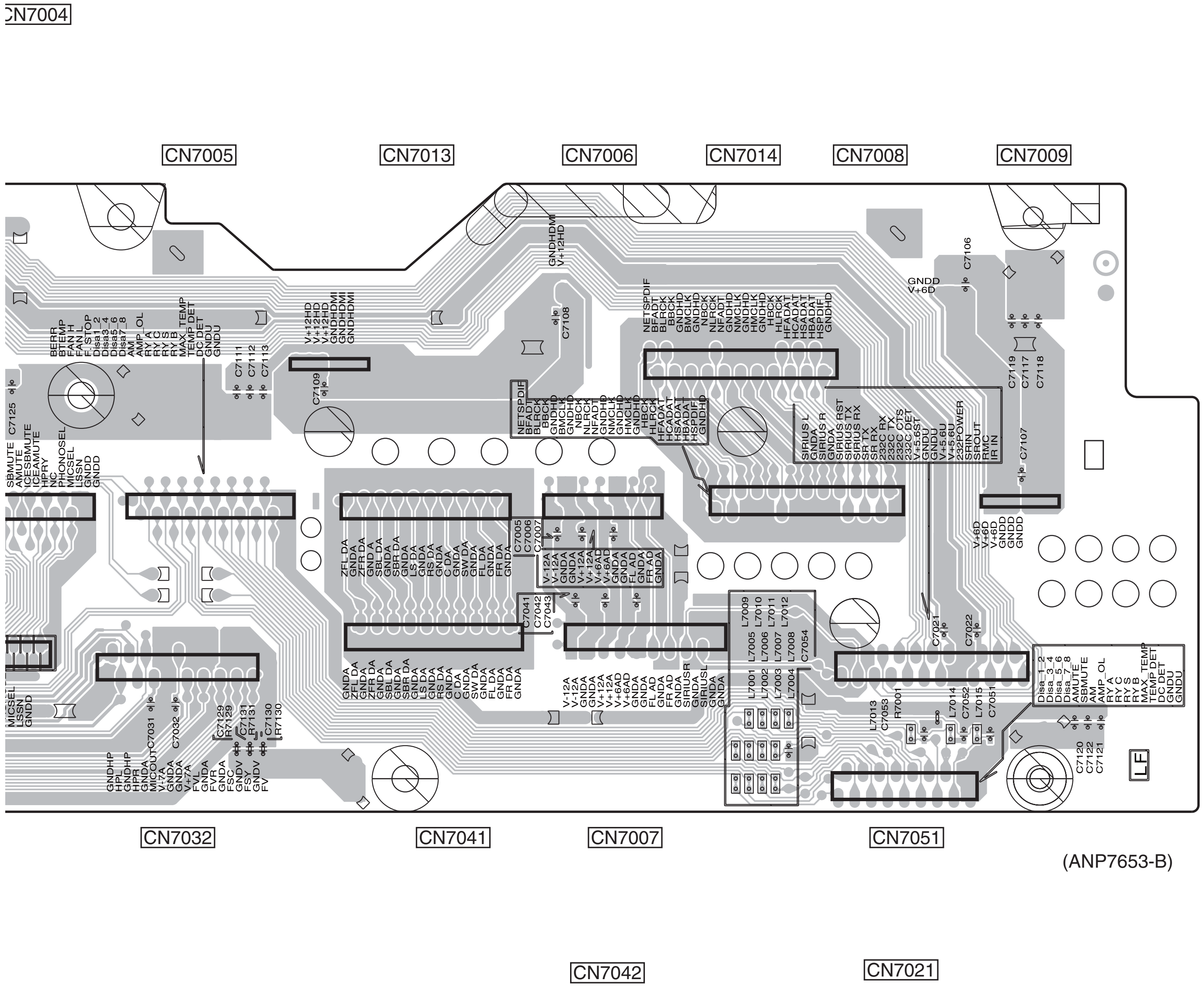
E

F

F INTERFACE ASSY


CN7003
CN7004
CN7011
CN7012
CN7101
CN7001
SEC8-1
SEC8-2
0 1
0 1 2 3
0 1
0 1 2 3 4 5 6 7 8 9
A
B
C
C7103
C7102
C7115
C7114
C7116
C7133
C7132
R7132
D7132
GNDD
V+D
C7105
C7011
12VON
232SW HDMI
232SW EMMA
HD RST
HDSCK
HDSI
HDSO
HDREQO
HDREQI
GNDHD
GNDHD
BERR
BTEMP
FAN H
FAN L
F_STOP
Disa1_2
Disa3_4
Disa5_6
Disa7_8
AM
AMP_OL
RY A
C7123
C7124
C7125
RDSRST
RDSCK
RDSDT
TDO
TCLK
TDI
TCE
12VON
232SW HDMI
232SW EMMA
HD RST
HDSCK
HDSI
HDSO
HDREQO
HDREQI
GNDHD
VOLCK
VOLDT
ZVOLCK
ZVOLDT
Z3MUTE
Z2MUTE
SBMUTE
AMUTE
ICESBMUTE
ICEAMUTE
HPRY
NC
PHONOSEL
MICSEL
LSSN
GNDD
GNDD
C7001
C7002
T/U
VI
HPDET
HPR
GNDHP
HPL
GNDU
MICDET
HPDET
HOTPLUG2
HOTPLUG1
CEC SW
CEC IN/OUT
SIRIUS RST
SIRIUS TX
SIRIUS RX
IR IN
RMC
SR OUT
SR IN
232POWER
V+5.6U
V+5.6U
GNDU
GNDU
V+5.6ST
V+5.6ST
232C DET
232C CTS
232C TX
232C RX
HDMUTE
NC
R7073
R7074
C7074
R7075
C7073
C7033
C7071
R7071
C7072
C7004
C7003
R7072
C7061
C7062
R7061
BERR
BTEMP
GNDU
V+5.6U
MICDET
MICOUT
V-7A
GNDA
V+7A
FVR
GNDA
FVL
GNDV
FV
GNDV
FSY
GNDV
FSC
GNDV
INTERFACE ASSY
AWX9148
AWX
C7128
R7128
C7127
R7127
C7126
R7126
FANSTOP
FAN L
FAN H
V+5.6U
GNDU
GNDU
RDSRST
RDSCK
RDSDT
TDO
TCLK
TDI
TCE
VOLCK
VOLDT
ZVOLCK
ZVOLDT
Z3MUTE
Z2MUTE
SBMUTE
AMUTE
HPRY
NC
PHONOSEL
MICSEL
LSSN
GNDD
GNDHP
HPL
GNDHP
HPR
GNDA
MICOUT
C7031
CN7062
CN7002
CN7031
C

SIDE B


CN7004
CN7005
CN7013
CN7006
CN7014
CN7008
CN7009
CN7032
CN7041
CN7007
CN7051
CN7042
CN7021
(ANP7653-B)
LF
GNDHDMI
V+12HD
GNDD
V+6D
C7106
C7108
C7109
C7111
C7112
C7113
C7125
C7119
C7117
C7118
C7107
BERR
BTEMP
FAN H
FAN L
F_STOP
Disa1_2
Disa3_4
Disa5_6
Disa7_8
AM
AMP_OL
RY A
RY C
RY S
RY B
MAX_TEMP
TEMP DET
DC DET
GNDU
GNDU
V+12HD
V+12HD
V+12HD
GNDHDMI
GNDHDMI
GNDHDMI
NETSPDIF
BFADT
BLRCK
BBCK
GNDHD
BMCLK
GNDHD
NBCK
NLRCK
NFADT
GNDHD
NMCLK
GNDHD
HMCLK
GNDHD
HBCK
HLRCK
HFADAT
HCADAT
HSADAT
HBADAT
HSPDIF
GNDHD
SIRIUS L
GNDA
SIRIUS R
GNDA
SIRIUS RST
SIRIUS TX
SIRIUS RX
SR TX
SR RX
232C RX
232C TX
232C CTS
232C DET
V+5.5ST
GNDU
GNDU
V+5.6U
V+5.6U
232POWER
SRIN
SROUT
RMC
IR IN
SBMUTE
AMUTE
ICESBMUTE
ICEAMUTE
HPRY
NC
PHONOSEL
MICSEL
LSSN
GNDD
GNDD
ZFL_DA
GNDA
ZFR DA
GND A
SBL_DA
GNDA
SBR DA
GNDA
LS DA
GNDA
RS DA
GNDA
C DA
GNDA
SW DA
GNDA
FL DA
GNDA
FR DA
GNDA
C7005
C7006
C7007
V-12A
V-12A
GNDA
GNDA
V+12A
V+12A
V+6AD
V+6AD
GNDA
FL AD
GNDA
FR AD
GNDA
C7041
C7042
C7043
SIRIUSR
SIRIUSL
V+6D
V+6D
V+6D
GNDD
GNDD
GNDD
L7009
L7010
L7011
L7012
L7005
L7006
L7007
L7008
L7001
L7002
L7003
L7004
C7054
C7021
C7022
L7013
C7053
R7001
L7014
C7052
L7015
C7051
Disa_1_2
Disa_3_4
Disa_5_6
Disa_7_8
AMUTE
SBMUTE
AM
AMP_OL
RY A
RY C
RY S
RY B
MAX_TEMP
TEMP DET
DC DET
GNDU
GNDU
C7120
C7122
C7121
MICSEL
LSSN
GNDD
GNDHP
HPL
GNDHP
HPR
GNDA
MICOUT
V-7A
GNDA
GNDA
V+7A
FVL
GNDA
FVR
GNDA
FSC
GNDV
FSY
GNDV
FV
C7031
C7032
C7129
R7129
C7131
R7131
C7130
R7130

11.7 COMPONENT and V BRIDGE ASSYS

SIDE A

A

G COMPONENT ASSY

IC Q

Q6025

B

Q6013
Q6011
Q6009
Q6023
IC6007
Q6010
Q6014 Q6012
Q6024

IC6002

C

IC6005
IC6008
IC6001
IC6009

IC6015

IC6012
IC6013

IC6003

IC6004

IC6010

D

IC6014

Q6002
Q6004 Q6006
Q6007 Q6001

Q6021
Q6003 Q6016
Q6005 Q6020
Q6015

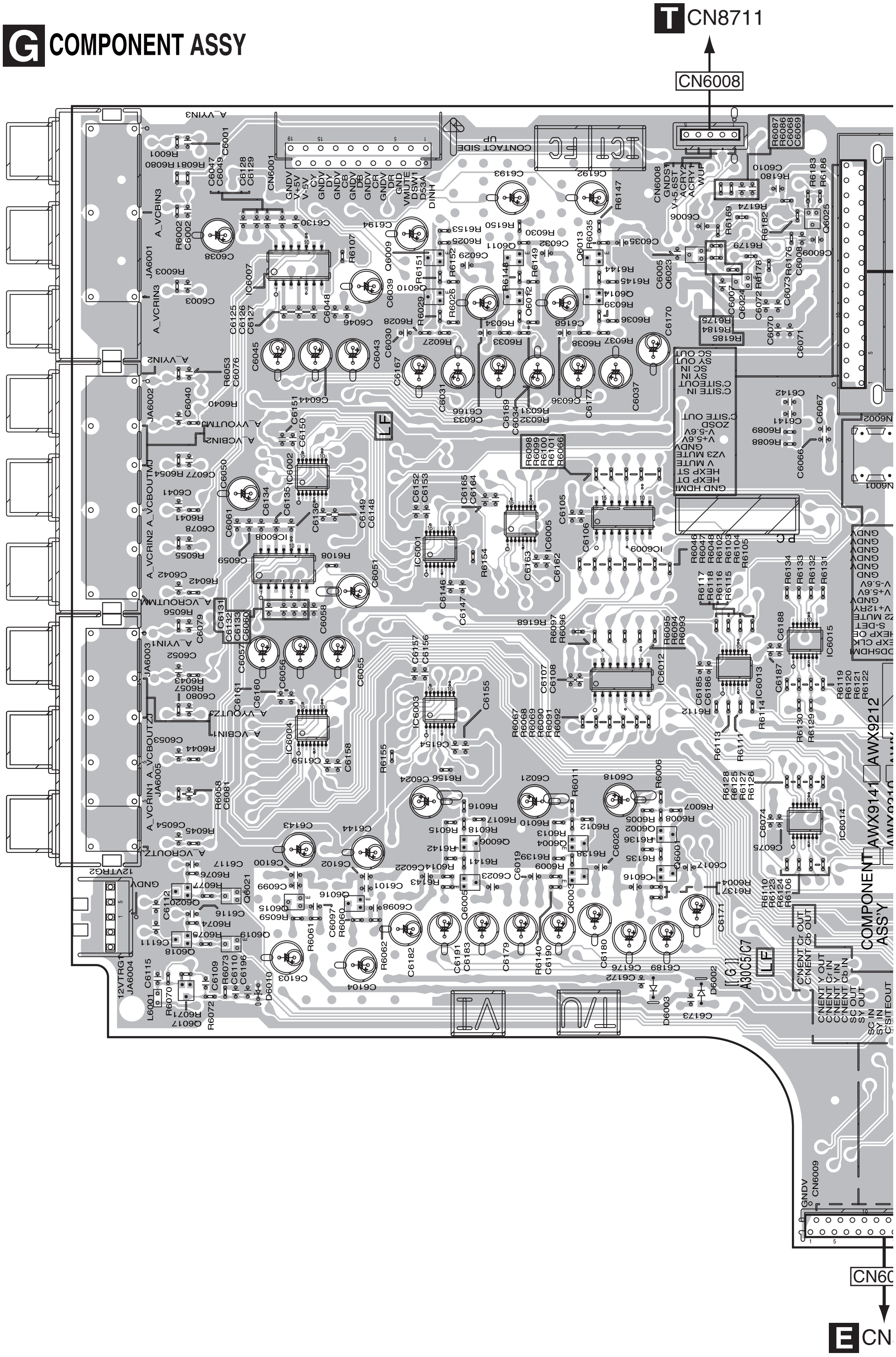
Q6019

Q6018
IC6006 Q6022

Q6008

Q6017

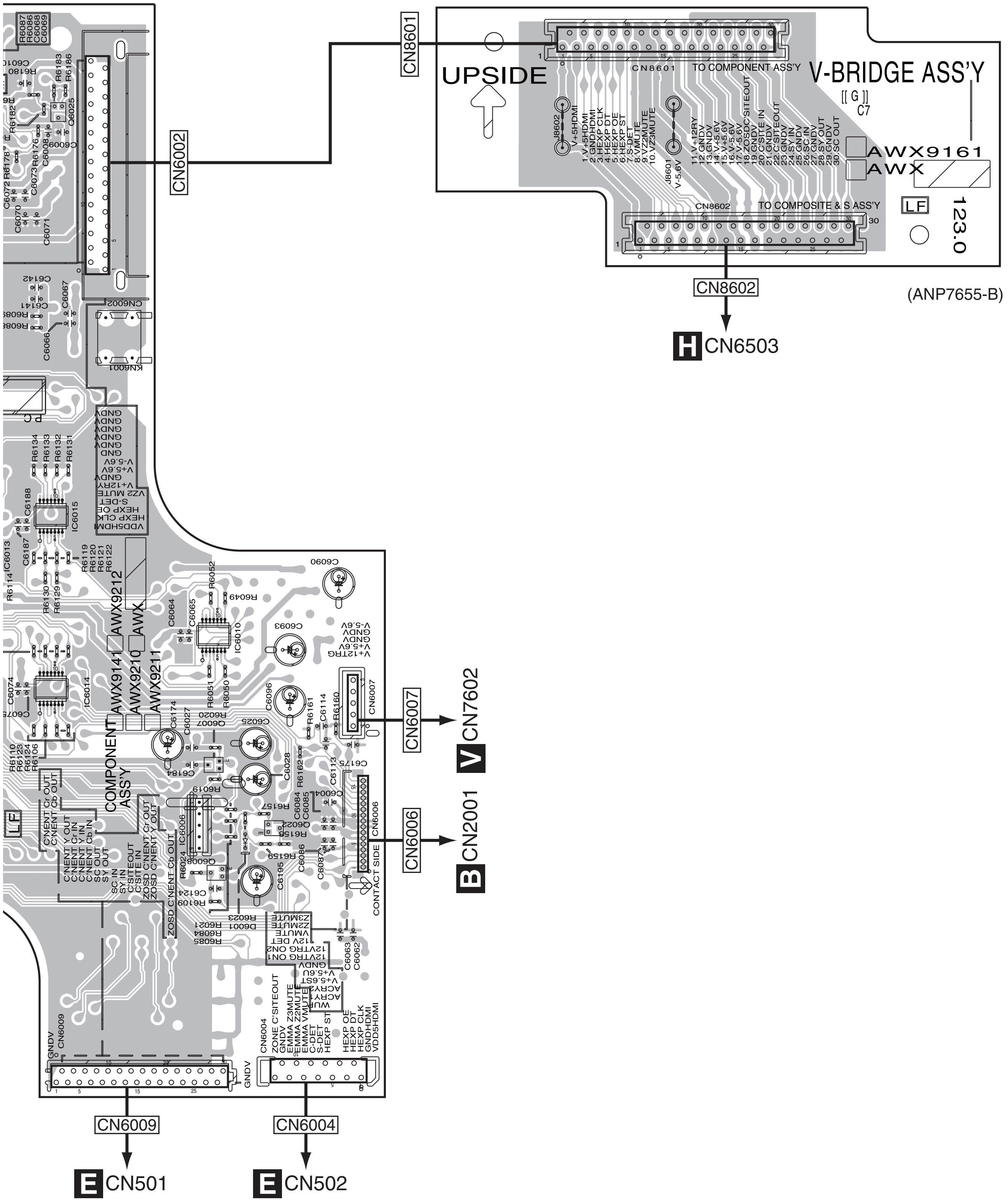
E


T CN8711
CN6008
CN6001
CONTACT SIDE
JA6001
JA6002
JA6003
JA6004
JA6005
A_VCBIN3
A_VCRIN3
A_VYIN3
A_VYIN2
A_VCBIN2
A_VCRIN2
A_VYIN1
A_VCBIN1
A_VCRIN1
A_VYOUTM
A_VCBOUTM
A_VCROUTM
A_VYOUT2
A_VCBOUT2
A_VCROUT2
12VTRG1
12VTRG2
GNDV
AWX9141
AWX9212
COMPONENT ASSY
A30C5/C7
CN6009
CN60
E CN

F

G J

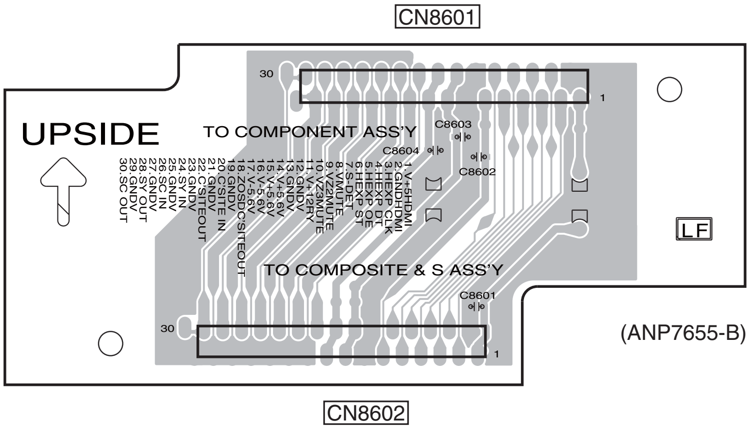
J V-BRIDGE ASSY


CN8601
UPSIDE
CN8601 TO COMPONENT ASS'Y
V-BRIDGE ASS'Y
[[G]]
C7
J8602
V+5HDMI
1.V+5HDMI
2.GNDHDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.VMUTE
9.VZ2MUTE
10.VZ3MUTE
J8601
V-5.6V
11.V+12RY
12.GNDV
13.GNDV
14.V+5.6V
15.V+5.6V
16.V-5.6V
17.V-5.6V
18.ZOSDC'SITEOUT
19.GNDV
20.C'SITE IN
21.GNDV
22.C'SITEOUT
23.GNDV
24.SY IN
25.GNDV
26.SC IN
27.GNDV
28.SY OUT
29.GNDV
30.SC OUT
AWX9161
AWX
CN8602 TO COMPOSITE & S ASS'Y
LF
123.0
CN8602
(ANP7655-B)
H CN6503
CN6002
CN6007
V CN7602
CN6006
B CN2001
CN6009
CN6004
E CN501
E CN502
(ANP7651-B)
COMPONENT ASS'Y
AWX9141
AWX9210
AWX9211
AWX9212
AWX
LF
CONTACT SIDE
IC6006
IC6010
IC6013
IC6014
IC6015
KN6001
GNDV
V-5.6V
V+5.6V
V+12RY
VZ2 MUTE
S-DET
HEXP OE
HEXP CLK
VDD5HDMI
V+12TRG
C'NENT Cr OUT
C'NENT Cb OUT
C'NENT Y OUT
C'NENT Cr IN
C'NENT Y IN
C'NENT Cb IN
SC OUT
SY OUT
SC IN
SY IN
C'SITEOUT
C'SITE IN
ZOSD C'NENT Cr OUT
ZOSD C'NENT Y OUT
ZOSD C'NENT Cb OUT
Z3MUTE
Z2MUTE
VMUTE
12V DET
12VTRG ON2
12VTRG ON1
ZONE C'SITEOUT
EMMA Z3MUTE
EMMA Z2MUTE
EMMA VMUTE
C-DET
S-DET
HEXP ST
HEXP OE
HEXP DT
HEXP CLK
GNDHDMI
VDD5HDMI

SIDE B

A

J V-BRIDGE ASSY

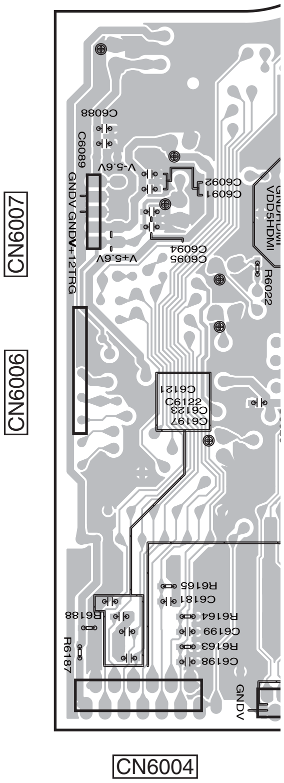

CN8601
30
1
UPSIDE
TO COMPONENT ASS'Y
C8603
C8604
C8602
1.V+5HDMI
2.GNDHDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.VMUTE
9.VZ2MUTE
10.VZ3MUTE
11.V+12RY
12.GNDV
13.GNDV
14.V+5.6V
15.V+5.6V
16.V-5.6V
17.V-5.6V
18.ZOSDC'SITEOUT
19.GNDV
20.C'SITE IN
21.GNDV
22.C'SITEOUT
23.GNDV
24.SY IN
25.GNDV
26.SC IN
27.GNDV
28.SY OUT
29.GNDV
30.SC OUT
LF
TO COMPOSITE & S ASS'Y
C8601
30
1
CN8602

(ANP7655-B)

B

C

D


CN6007
CN6006
C6088
C6089
V-5.6V
GNDV
GNDV
V+12TRG
V+5.6V
C6092
C6091
C6094
C6095
VDD5HDMI
R6022
C6121
C6122
C6123
C6197
R6165
C6181
R6164
C6199
R6163
C6198
R6188
R6187
GNDV
CN6004

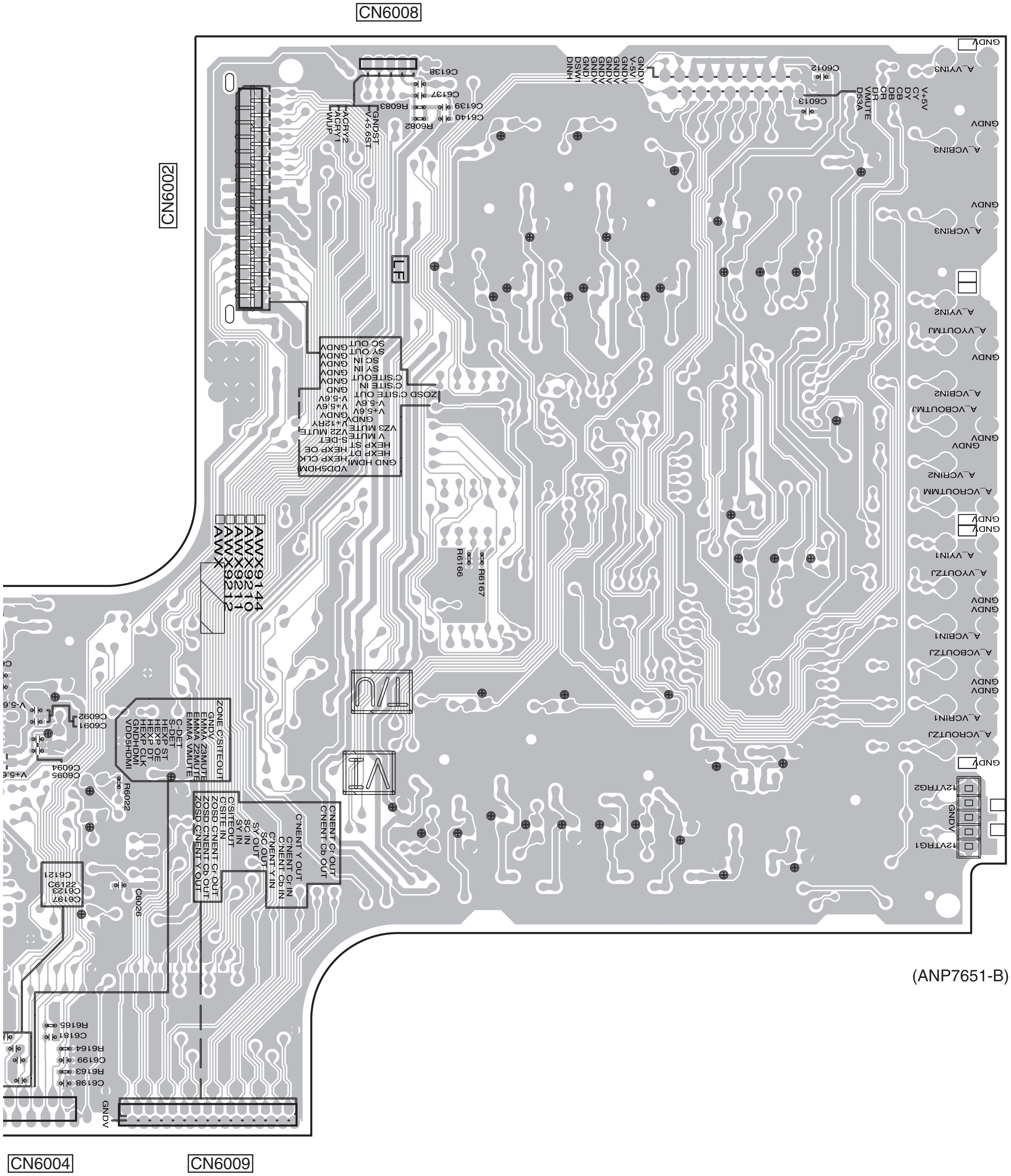
E

F

G J

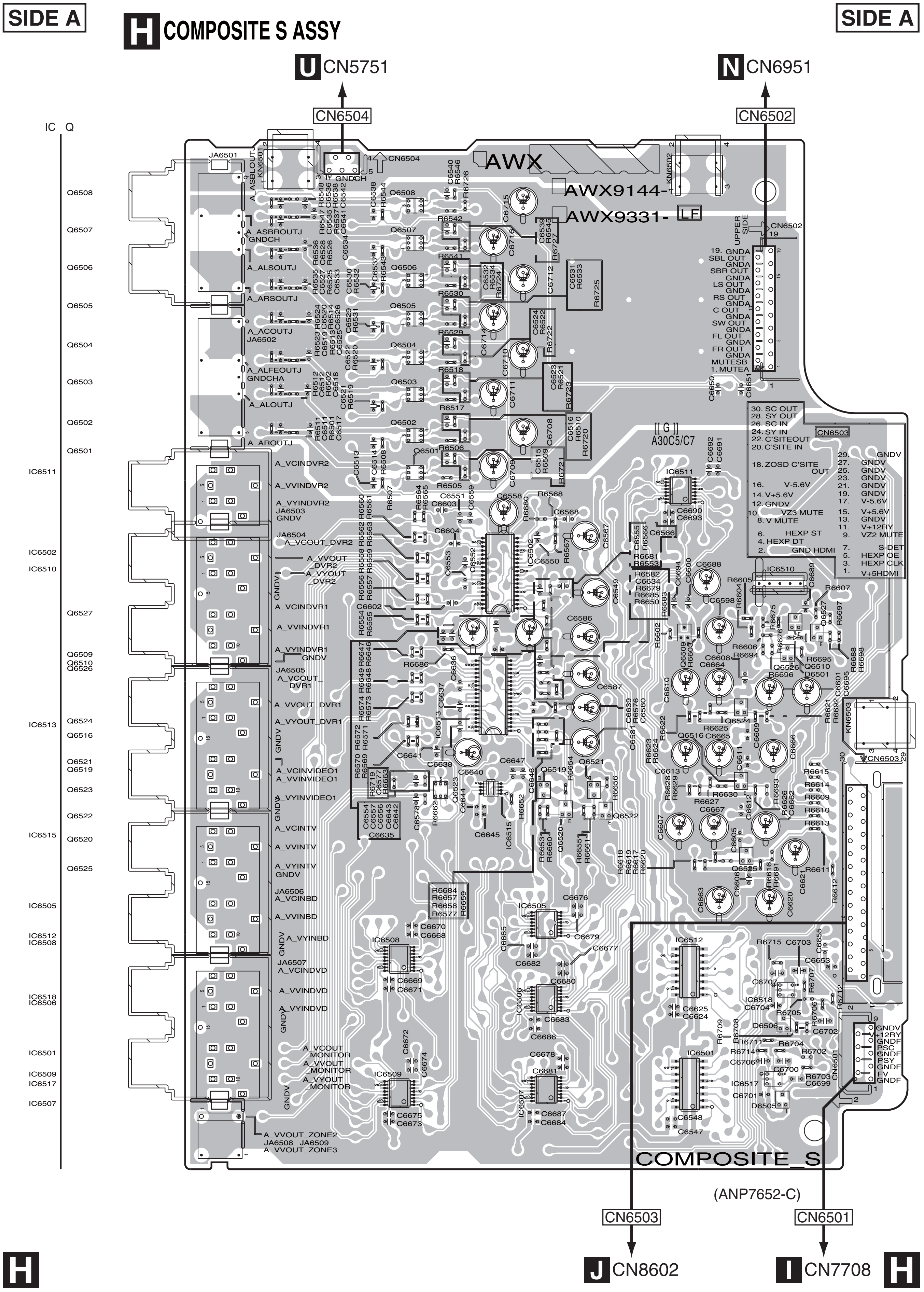
SIDE B

G COMPONENT ASSY


CN6008
CN6002
CN6004
CN6009
LF
AWX9144
AWX9210
AWX9211
AWX9212

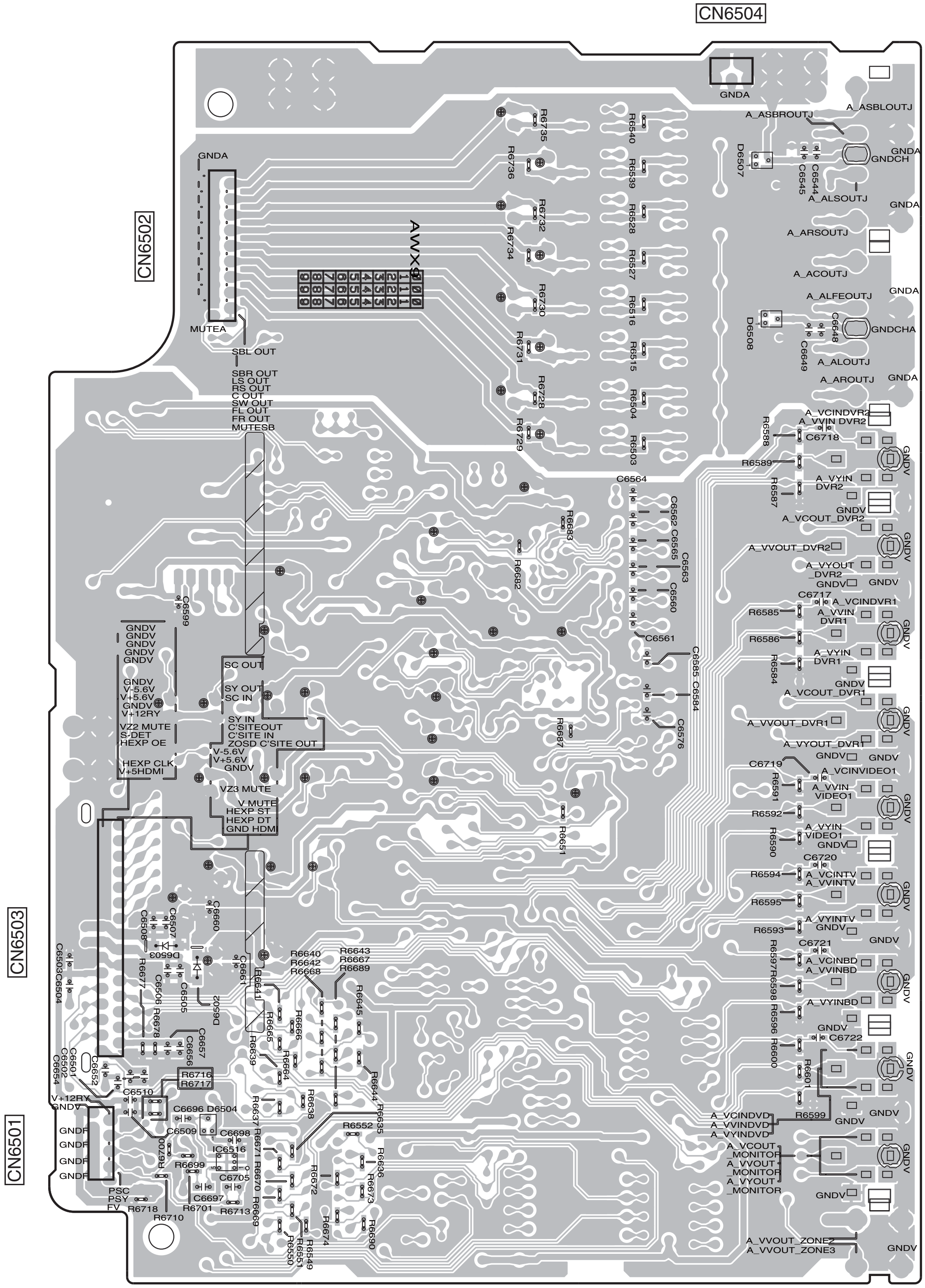
(ANP7651-B)

11.8 COMPOSITE S ASSY


SIDE A
H COMPOSITE S ASSY
SIDE A
U CN5751
N CN6951
CN6504
CN6502
IC Q
AWX
AWX9144-
AWX9331- LF
19. GNDA
SBL OUT
GNDA
SBR OUT
GNDA
LS OUT
GNDA
RS OUT
GNDA
C OUT
GNDA
SW OUT
GNDA
FL OUT
GNDA
FR OUT
GNDA
MUTESB
1. MUTEA
30. SC OUT
28. SY OUT
26. SC IN
24. SY IN
22. C'SITEOUT
20. C'SITE IN
18. ZOSD C'SITE OUT
16. V-5.6V
14. V+5.6V
12. GNDV
10. VZ3 MUTE
8. V MUTE
6. HEXP ST
4. HEXP DT
2. GND HDMI
29. GNDV
27. GNDV
25. GNDV
23. GNDV
21. GNDV
19. GNDV
17. V-5.6V
15. V+5.6V
13. GNDV
11. V+12RY
9. VZ2 MUTE
7. S-DET
5. HEXP OE
3. HEXP CLK
1. V+5HDMI
CN6503
[[G]] A30C5/C7
GNDV
+12RY
GNDF
PSC
GNDF
PSY
GNDF
FV
GNDF
CN6501
COMPOSITE_S
(ANP7652-C)
CN6503
CN6501
J CN8602
I CN7708
H
H

SIDE B **SIDE B**

H COMPOSITE S ASSY

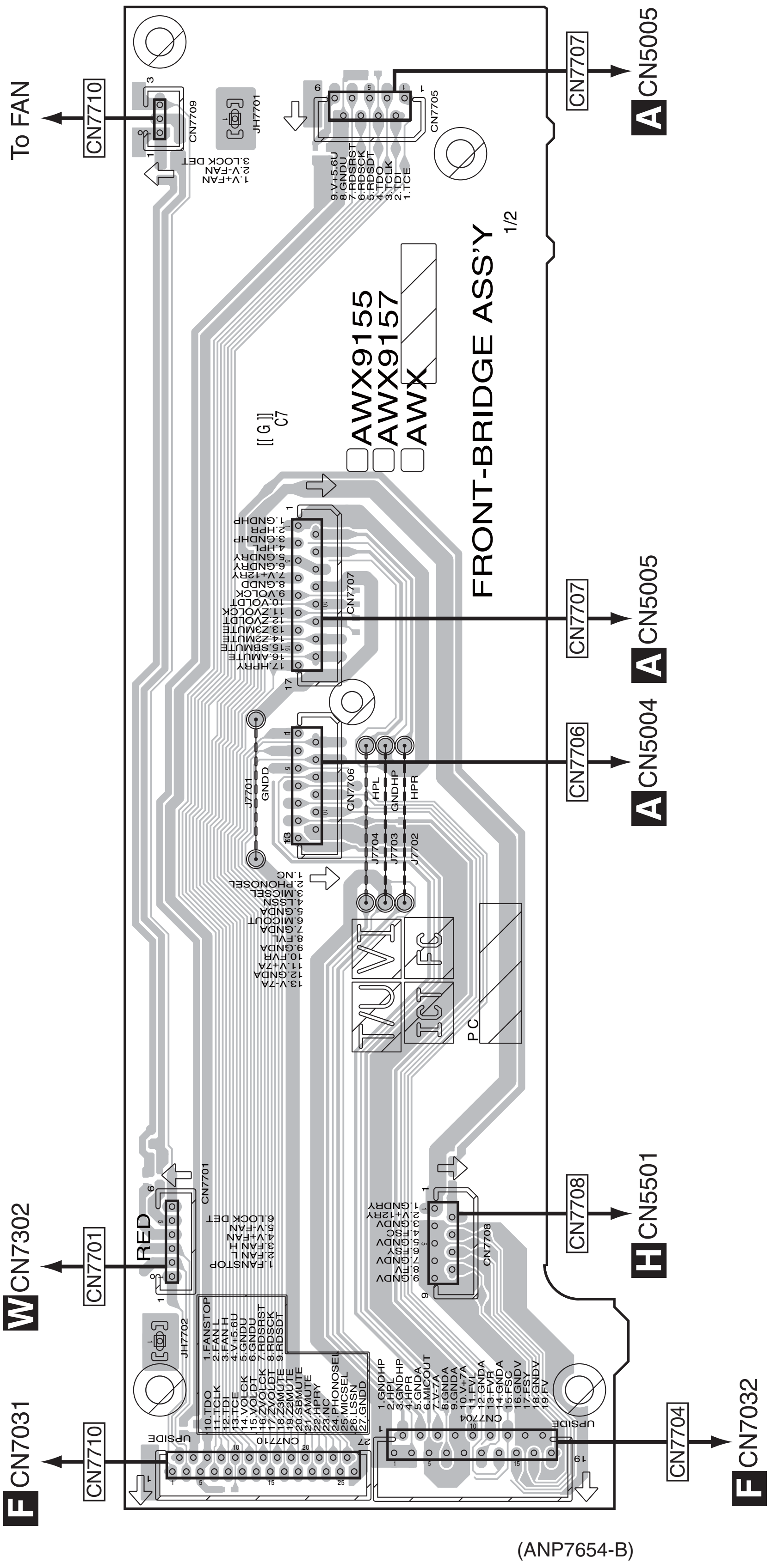

CN6504
GNDA
A_ASBROUTJ
A_ASBLOUTJ
D6507
C6544
C6545
GNDCH
A_ALSOUTJ
A_ARSOUTJ
A_ACOUTJ
A_ALFEOUTJ
D6508
C6648
C6649
GNDCHA
A_ALOUTJ
A_AROUTJ
R6735
R6736
R6732
R6734
R6730
R6731
R6728
R6729
R6540
R6539
R6528
R6527
R6516
R6515
R6504
R6503
AWX9
CN6502
MUTEA
SBL OUT
SBR OUT
LS OUT
RS OUT
C OUT
SW OUT
FL OUT
FR OUT
MUTESB
A_VCINDVR2
A_VVIN DVR2
C6718
R6588
R6589
R6587
A_VYIN DVR2
GNDV
A_VCOUT_DVR2
A_VVOUT_DVR2
A_VYOUT _DVR2
C6717
A_VCINDVR1
R6585
A_VVIN DVR1
R6586
R6584
A_VYIN DVR1
A_VCOUT_DVR1
A_VVOUT_DVR1
A_VYOUT_DVR1
C6719
A_VCINVIDEO1
R6591
A_VVIN VIDEO1
R6592
R6590
A_VYIN VIDEO1
C6720
R6594
A_VCINTV
A_VVINTV
R6595
A_VYINTV
R6593
C6721
A_VCINBD
A_VVINBD
R6597
R6598
R6596
R6600
A_VYINBD
C6722
R6601
R6599
A_VCINDVD
A_VVINDVD
A_VYINDVD
A_VCOUT _MONITOR
A_VVOUT _MONITOR
A_VYOUT _MONITOR
A_VVOUT_ZONE2
A_VVOUT_ZONE3
C6564
C6562
C6565
C6563
C6560
C6561
C6585
C6584
C6576
R6683
R6682
R6687
R6651
C6599
GNDV
V-5.6V
V+5.6V
V+12RY
VZ2 MUTE
S-DET
HEXP OE
HEXP CLK
V+5HDMI
SC OUT
SY OUT
SC IN
SY IN
C'SITEOUT
C'SITE IN
ZOSD C'SITE OUT
VZ3 MUTE
V MUTE
HEXP ST
HEXP DT
GND HDMI
CN6503
C6503
C6504
C6507
C6508
C6660
D6503
R6677
C6506
C6505
C6661
D6502
R6678
C6657
C6656
C6501
C6502
C6654
C6652
R6716
R6717
C6510
V+12RY
C6696
D6504
C6509
C6698
IC6516
R6700
R6699
C6705
C6697
R6701
R6713
R6718
R6710
PSC
PSY
FV
GNDF
CN6501
R6640
R6642
R6668
R6643
R6667
R6689
R6641
R6645
R6665
R6666
R6639
R6664
R6644
R6637
R6638
R6635
R6671
R6670
R6669
R6552
R6636
R6672
R6673
R6674
R6690
R6651
R6650
R6549

(ANP7652-C)

11.9 FRONT BRIDGE ASSY

SIDE A **SIDE A**

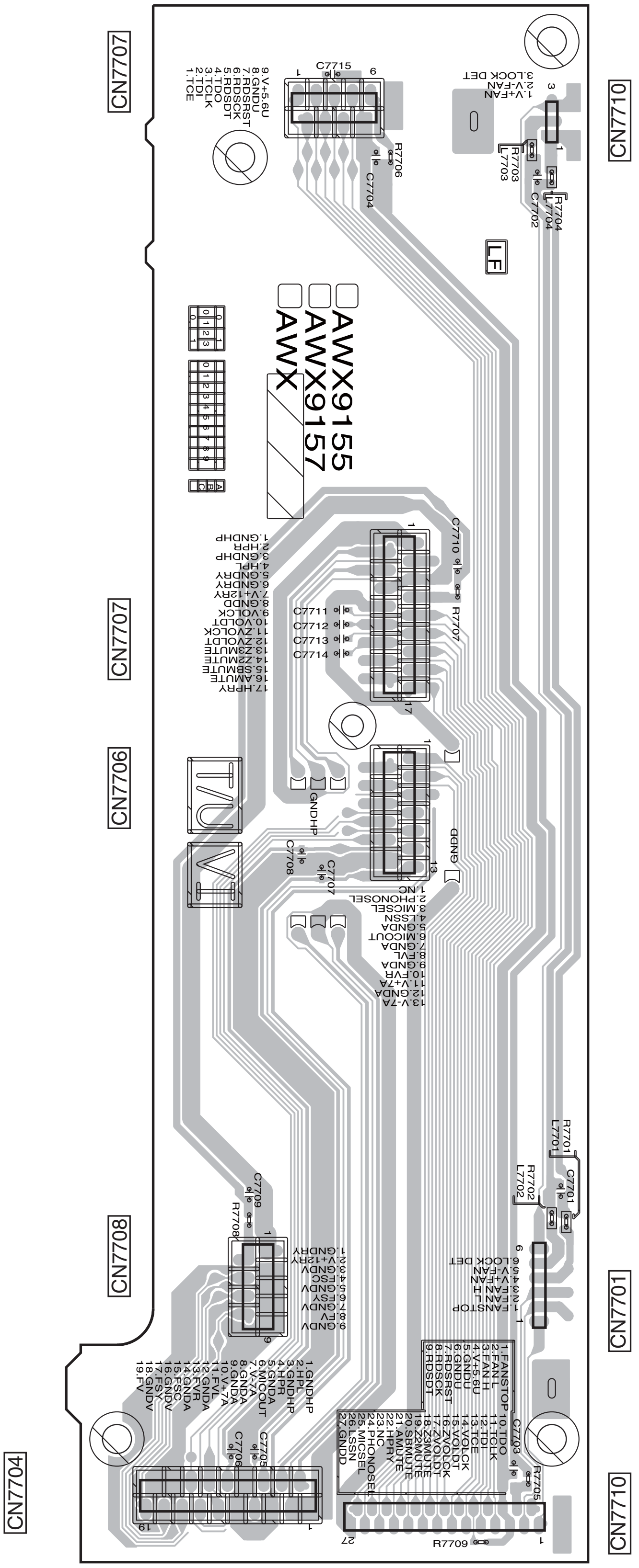
I **FRONT BRIDGE ASSY**


To FAN
CN7710
CN7709
JH7701
CN7705
CN7707
A CN5005
FRONT-BRIDGE ASS'Y
1/2
AWX9155
AWX9157
AWX
C7
CN7707
A CN5005
CN7706
A CN5004
J7701
GNDD
HPL
GNDHP
HPR
J7704
J7703
J7702
PC
CN7708
H CN5501
CN7701
RED
W CN7302
JH7702
CN7710
F CN7031
CN7704
F CN7032
UPSIDE

(ANP7654-B)

I **I**

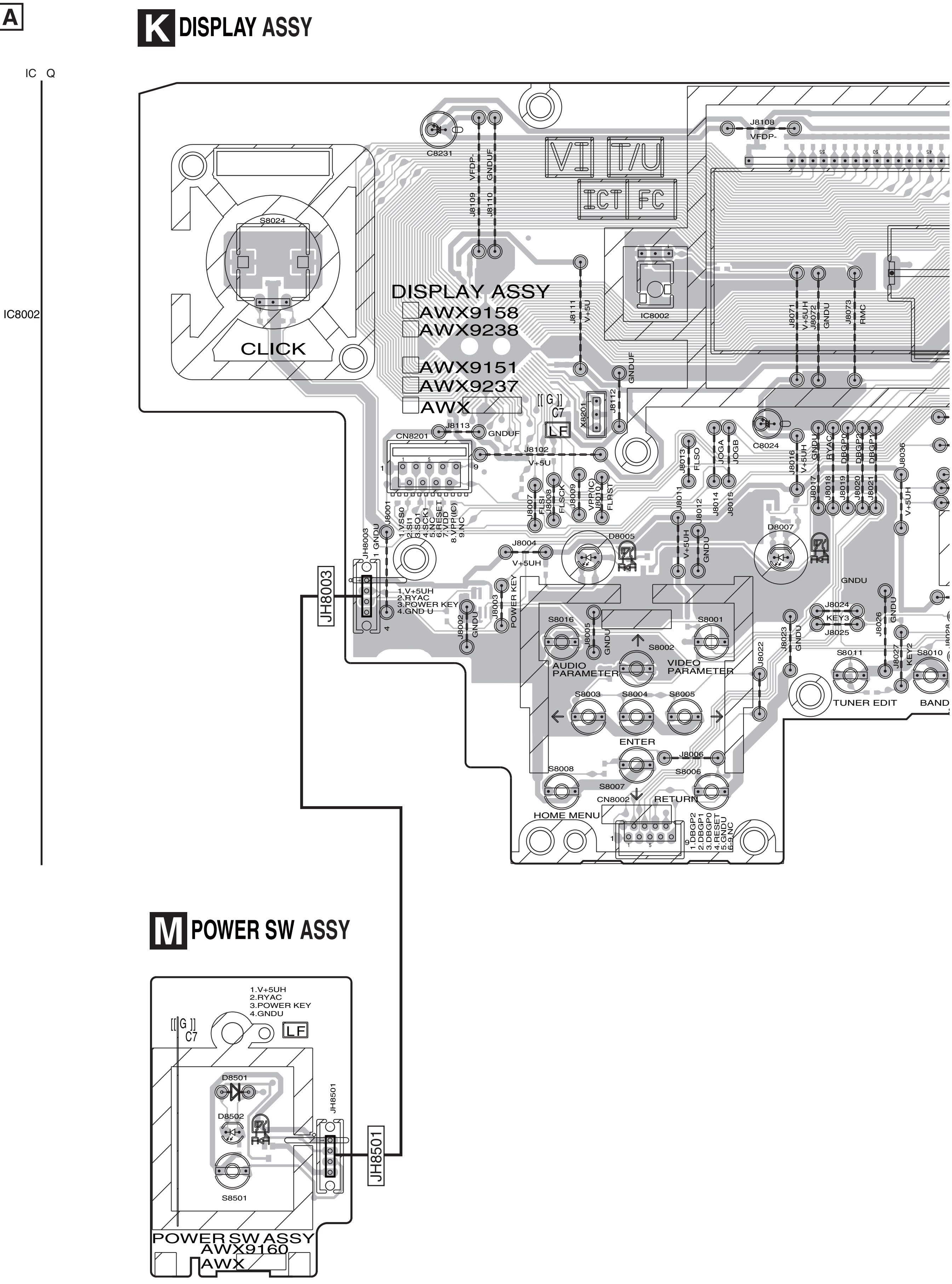
I FRONT BRIDGE ASSY


CN7707
CN7710
CN7706
CN7708
CN7701
CN7704
AWX9155
AWX9157
AWX
LF
C7715
R7706
C7704
R7703
L7703
R7704
L7704
C7702
C7710
R7707
C7711
C7712
C7713
C7714
C7708
C7707
GNDHP
GNDD
R7701
L7701
R7702
L7702
C7701
C7709
R7708
C7703
R7705
C7705
C7706
R7709

(ANP7654-B)

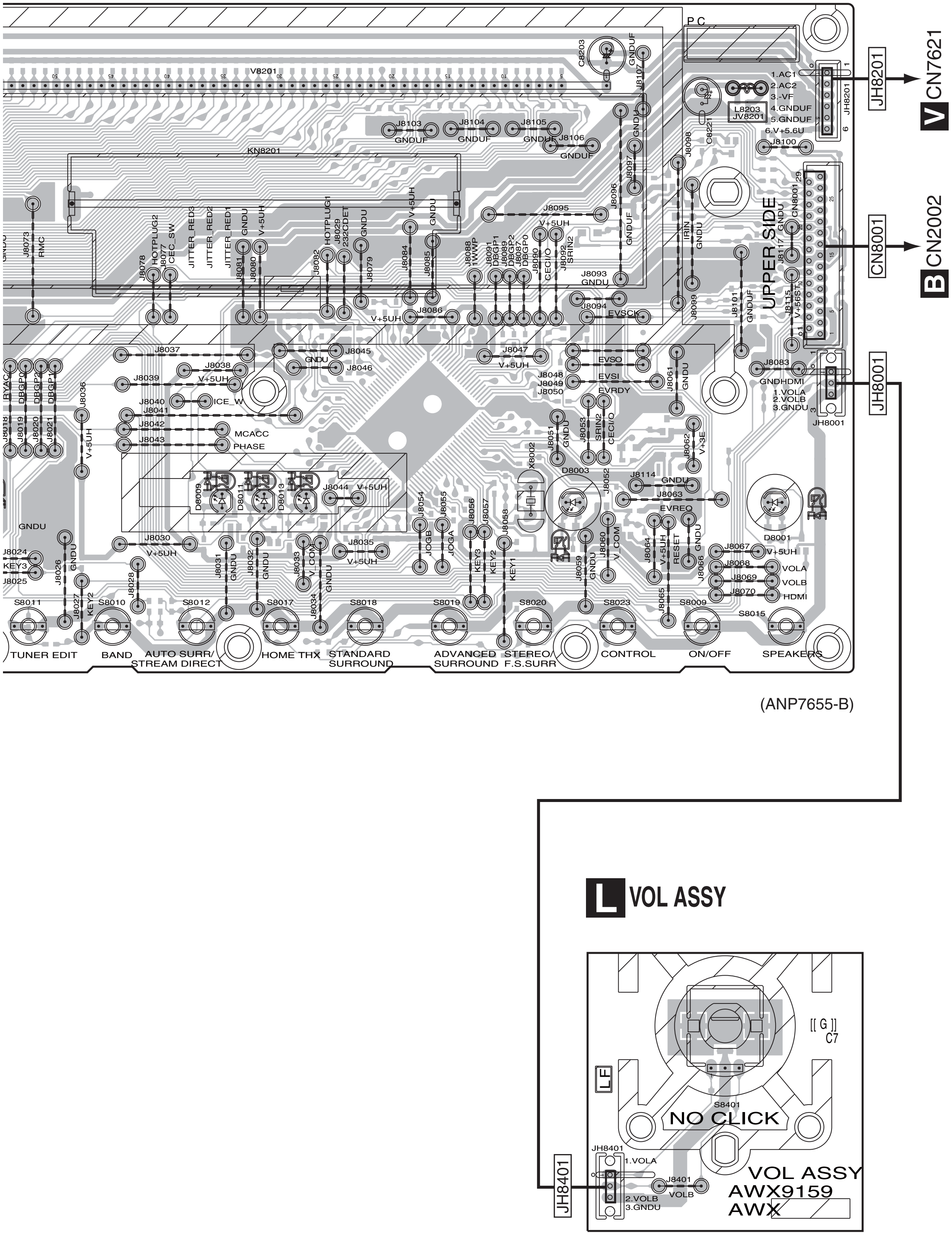
11.10 DISPLAY, POWER SW and VOL ASSYS

SIDE A


K DISPLAY ASSY
IC Q
IC8002
S8024
CLICK
C8231
J8109 VFDP-
J8110 GNDUF
VI T/U ICT FC
IC8002
J8108 VFDP-
DISPLAY ASSY
AWX9158
AWX9238
AWX9151
AWX9237
AWX
J8111 V+5U
J8071 V+5UH
J8072 GNDU
J8073 RMC
J8112 GNDUF
X8201
[[G]] C7 LF
J8113 GNDUF
CN8201
J8102 V+5U
C8024
J8013 FLSO
JOGA JOGB
J8014 J8015
J8016 V+5UH
GNDU RYAC DBGP0 DBGP2 DBGP1
J8017 J8018 J8019 J8020 J8021
J8036 V+5UH
J8001
1.VSS0 2.SI1 3.SO1 4.SCK1 5.NC 6.RESET 7.VDD 8.VPP(IC) 9.NC
J8007 FLSI
J8008 FLSCK
J8009 VPP(IC)
J8010 FLRST
J8011 V+5UH
J8012 GNDU
D8005 D8007
JH8003
1 GNDU
J8004 V+5UH
JH8003
1.V+5UH 2.RYAC 3.POWER KEY 4.GND U
J8002 GNDU
J8003 POWER KEY
S8016 J8005 GNDU
S8002
S8001
AUDIO PARAMETER
VIDEO PARAMETER
J8022
J8023 GNDU
J8024 KEY3 J8025
J8026 GNDU
S8011
J8027 KEY2
S8010
S8003 S8004 S8005
TUNER EDIT
BAND
ENTER
J8006
S8006
S8008
S8007
CN8002
RETURN
HOME MENU
1.DBGP2 2.DBGP1 3.DBGP0 4.RESET 5.GNDU 6-9.NC
M POWER SW ASSY
1.V+5UH 2.RYAC 3.POWER KEY 4.GNDU
[[G]] C7 LF
D8501
D8502
JH8501
JH8501
S8501
POWER SW ASSY
AWX9160
AWX

(ANP7655-B)

SIDE A


V8201
KN8201
PC
C8203
C8221
L8203
JV8201
JH8201
1.AC1
2.AC2
3.-VF
4.GNDUF
5.GNDUF
6.V+5.6U
JH8201
V CN7621
CN8001
B CN2002
UPPER SIDE
JH8001
1.VOLA
2.VOLB
3.GNDU
D8003
D8001
D8009
D8011
D8013
X8002
S8011
S8010
S8012
S8017
S8018
S8019
S8020
S8023
S8009
S8015
TUNER EDIT
BAND
AUTO SURR/
STREAM DIRECT
HOME THX
STANDARD
SURROUND
ADVANCED
SURROUND
STEREO/
F.S.SURR
CONTROL
ON/OFF
SPEAKERS
HOTPLUG2
CEC_SW
JITTER_RED3
JITTER_RED2
JITTER_RED1
HOTPLUG1
232CDET
RMC
MCACC
PHASE
ICE_W
EVSO
EVSI
EVRDY
EVSCK
EVREQ
IRIN
RESET
KEY1
KEY2
KEY3
JOGA
JOGB
V_COM
VOLA
VOLB
HDMI
GNDU
GNDUF
V+5UH
L VOL ASSY
[[G]]
C7
LF
S8401
NO CLICK
JH8401
1.VOLA
2.VOLB
3.GNDU
J8401
VOLB
VOL ASSY
AWX9159
AWX

(ANP7655-B)

(ANP7655-B)

L M K

SIDE B

K DISPLAY ASSY

IC Q

Q8009

IC8201

Q8010

IC8001

Q8012

Q8004

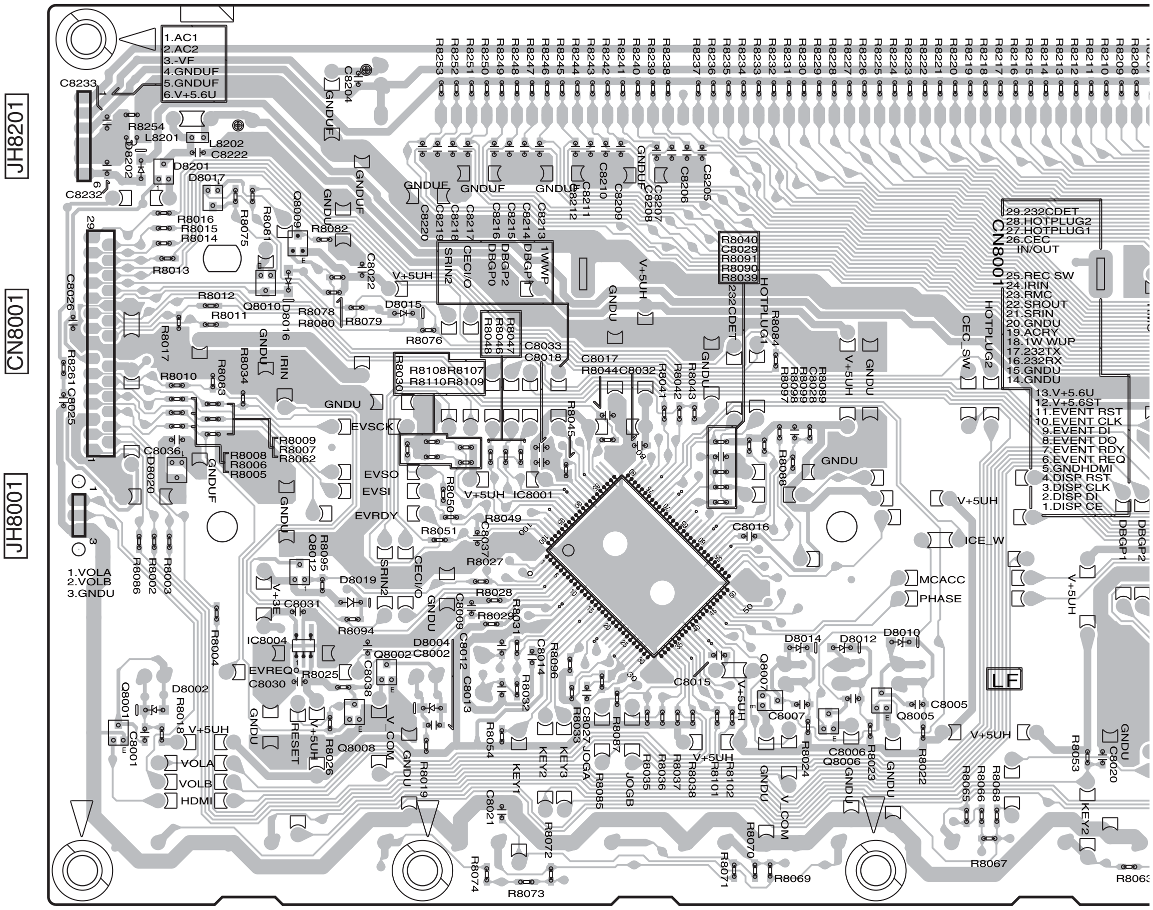
IC8004

Q8002
Q8003
Q8007

IC8003

Q8001
Q8005

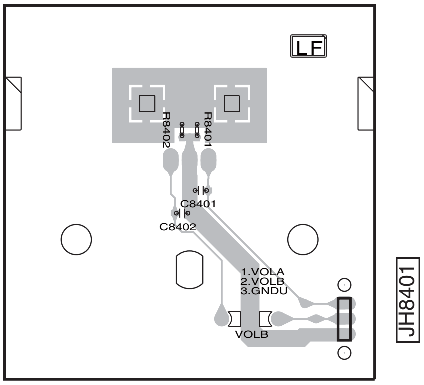
Q8008
Q8006


JH8201
1.AC1
2.AC2
3.-VF
4.GNDUF
5.GNDUF
6.V+5.6U
CN8001
JH8001
1.VOLA
2.VOLB
3.GNDU
IC8001
IC8004
Q8001
Q8002
Q8005
Q8006
Q8007
Q8008
Q8009
Q8010
Q8012
EVSCK
EVSO
EVSI
EVRDY
EVREQ
RESET
VOLA
VOLB
HDMI
KEY1
KEY2
KEY3
JOGA
JOGB
V_COM
MCACC
PHASE
ICE_W
CEC_SW
HOTPLUG1
HOTPLUG2
232CDET
DBGP0
DBGP1
DBGP2
1WWP
SRIN2
CECI/O
IRIN
CN8001
29.232CDET
28.HOTPLUG2
27.HOTPLUG1
26.CEC IN/OUT
25.REC SW
24.IRIN
23.RMC
22.SROUT
21.SRIN
20.GNDU
19.ACRY
18.1W WUP
17.232TX
16.232RX
15.GNDU
14.GNDU
13.V+5.6U
12.V+5.6ST
11.EVENT RST
10.EVENT CLK
9.EVENT DI
8.EVENT DO
7.EVENT RDY
6.EVENT REQ
5.GNDHDMI
4.DISP RST
3.DISP CLK
2.DISP DI
1.DISP CE
LF
GNDU
GNDUF
V+5UH

L VOL ASSY

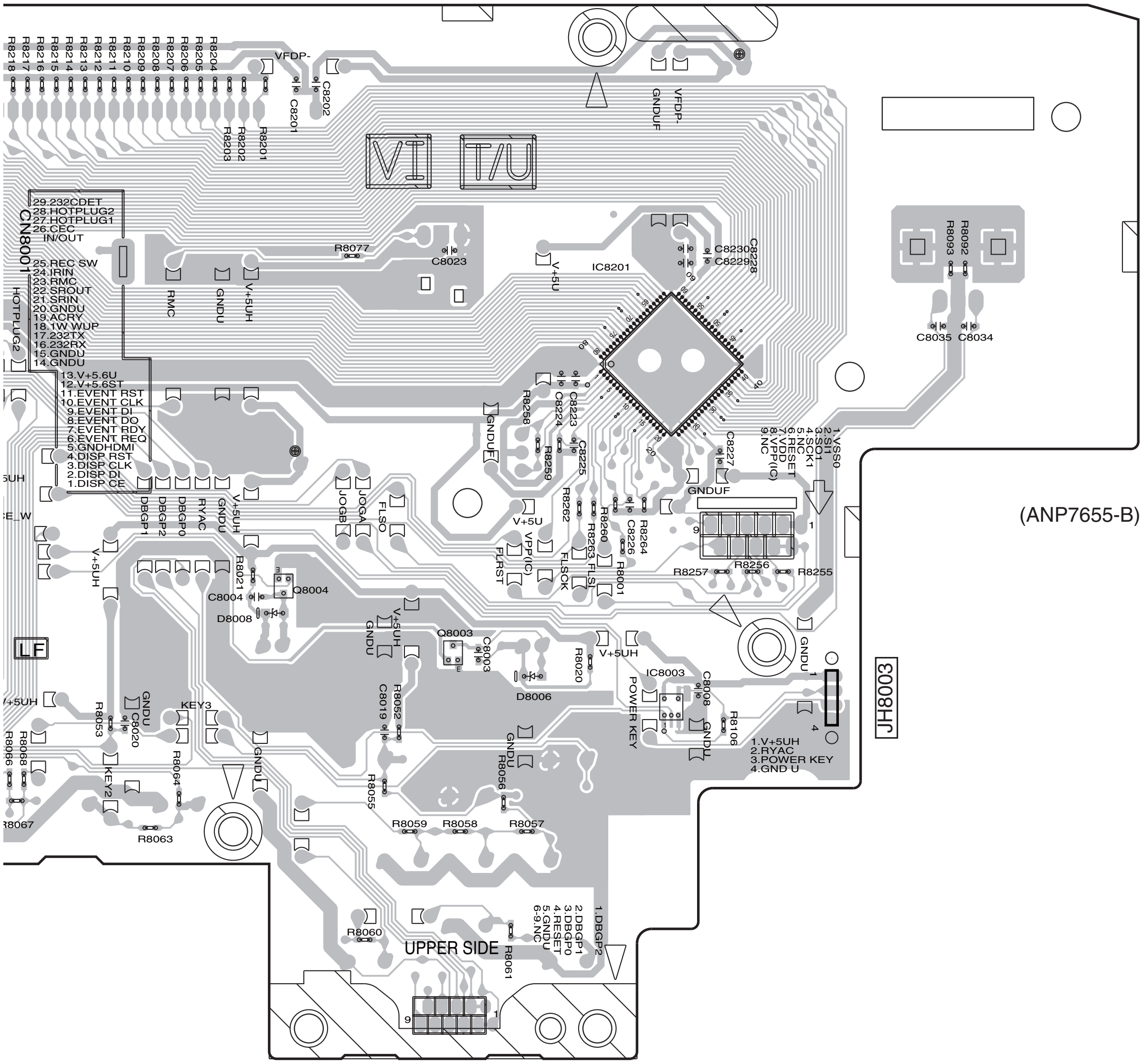
IC Q

Q8501


LF
R8402
R8401
C8401
C8402
1.VOLA
2.VOLB
3.GNDU
VOLB
JH8401

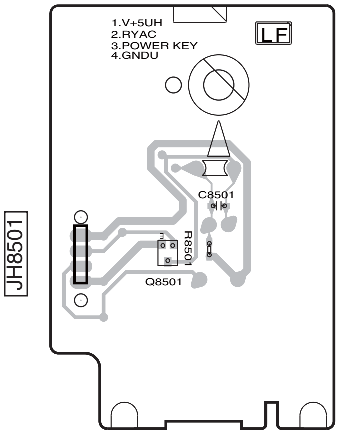
(ANP7655-B)

SIDE B


VFDP-
C8202
C8201
R8201
R8202
R8203
R8204
R8205
R8206
R8207
R8208
R8209
R8210
R8211
R8212
R8213
R8214
R8215
R8216
R8217
R8218
VFDP-
GNDUF
VI
T/U
CN8001
29.232CDET
28.HOTPLUG2
27.HOTPLUG1
26.CEC
IN/OUT
25.REC SW
24.IRIN
23.RMC
22.SROUT
21.SRIN
20.GNDU
19.ACRY
18.1W WUP
17.232TX
16.232RX
15.GNDU
14.GNDU
13.V+5.6U
12.V+5.6ST
11.EVENT RST
10.EVENT CLK
9.EVENT DI
8.EVENT DO
7.EVENT RDY
6.EVENT REQ
5.GNDHDMI
4.DISP RST
3.DISP CLK
2.DISP DI
1.DISP CE
HOTPLUG2
R8077
C8023
RMC
GNDU
V+5UH
V+5U
IC8201
C8230
C8229
C8228
R8092
R8093
C8035
C8034
R8258
C8224
C8223
C8225
R8259
GNDUF
1.VSS0
2.SI1
3.SO1
4.SCK1
5.NC
6.RESET
7.VDD
8.VPP(IC)
9.NC
C8227
GNDUF
R8262
R8260
C8226
R8264
R8263
R8001
FLSI
FLSCK
FLRST
VPP(IC)
V+5U
FLSO
JOGA
JOGB
DBGP1
DBGP2
DBGP0
RYAC
GNDU
V+5UH
R8257
R8256
R8255
R8021
C8004
Q8004
D8008
V+5UH
GNDU
Q8003
C8003
R8020
V+5UH
IC8003
C8008
POWER KEY
D8006
R8106
GNDU
GNDU
1.V+5UH
2.RYAC
3.POWER KEY
4.GND U
JH8003
LF
V+5UH
R8053
C8020
GNDU
KEY3
R8052
C8019
GNDU
R8056
R8055
R8068
R8066
KEY2
R8064
R8067
R8063
R8059
R8058
R8057
R8060
UPPER SIDE
R8061
1.DBGP2
2.DBGP1
3.DBGP0
4.RESET
5.GNDU
6-9.NC
9
1

(ANP7655-B)

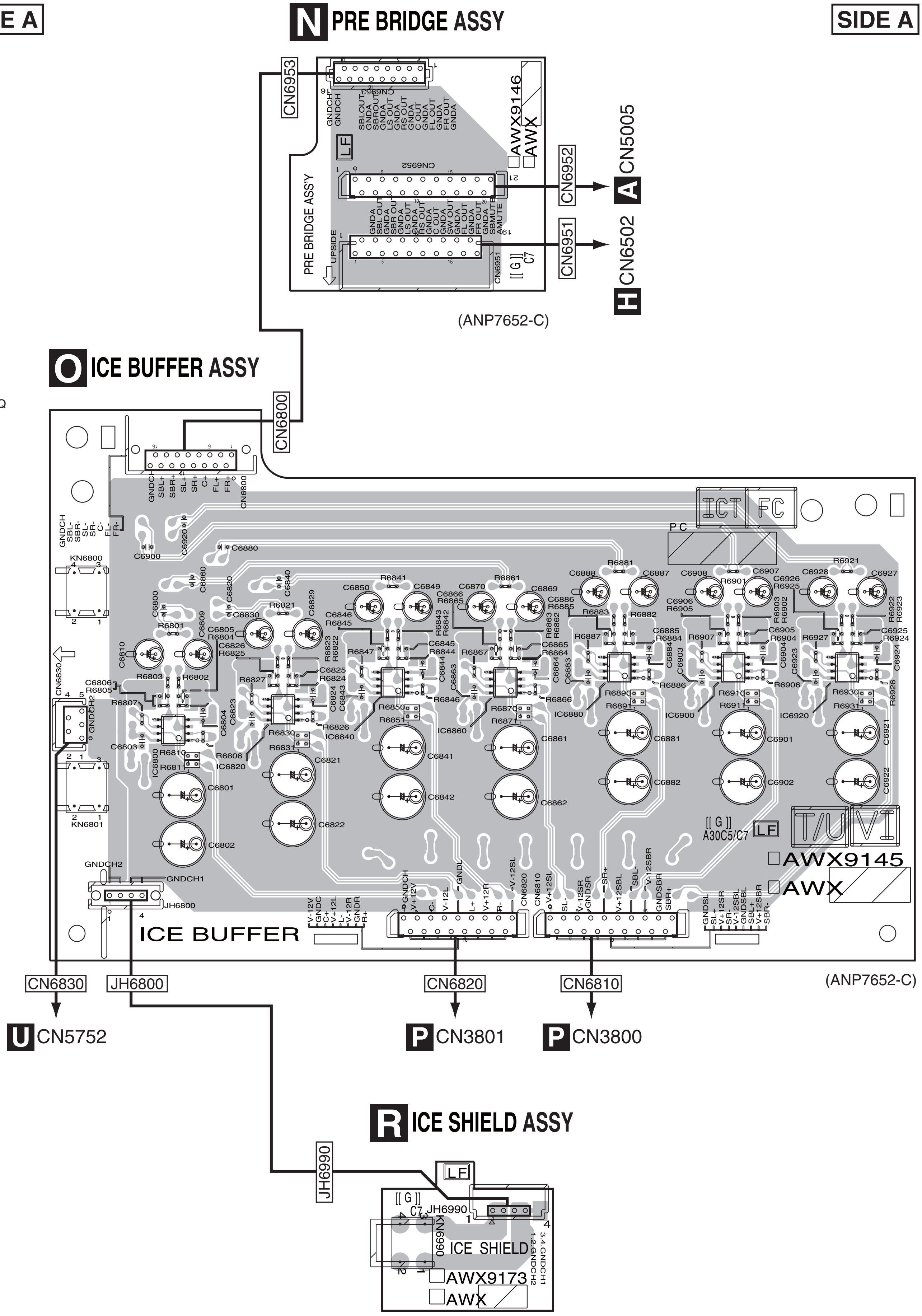
M POWER SW ASSY


1.V+5UH
2.RYAC
3.POWER KEY
4.GNDU
LF
C8501
R8501
Q8501
JH8501

(ANP7655-B)

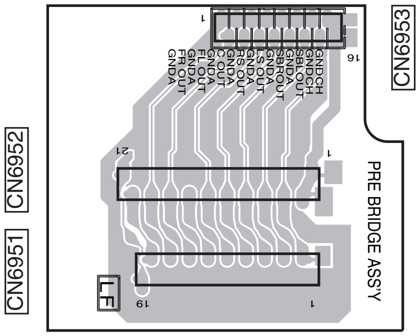
11.11 PRE BRIDGE, ICE BUFFER and ICE SHIELD ASSYS

SIDE A **SIDE A**


N PRE BRIDGE ASSY
CN6953
CN6952
CN6951
AWX9146
AWX
PRE BRIDGE ASS'Y
UPSIDE
LF
[[G]] C7
A CN5005
H CN6502
(ANP7652-C)
O ICE BUFFER ASSY
CN6800
IC Q
IC6900
IC6880
IC6920
IC6860
IC6840
IC6800
IC6820
KN6800
KN6801
CN6830
JH6800
GNDCH1
GNDCH2
ICE BUFFER
ICT
FC
PC
T/U
VI
[[G]] A30C5/C7
LF
AWX9145
AWX
CN6830
JH6800
CN6820
CN6810
(ANP7652-C)
U CN5752
P CN3801
P CN3800
R ICE SHIELD ASSY
JH6990
LF
[[G]] C7
KN6990
ICE SHIELD
3,4:GNDCH1
1,2:GNDCH2
AWX9173
AWX
(ANP7652-C)

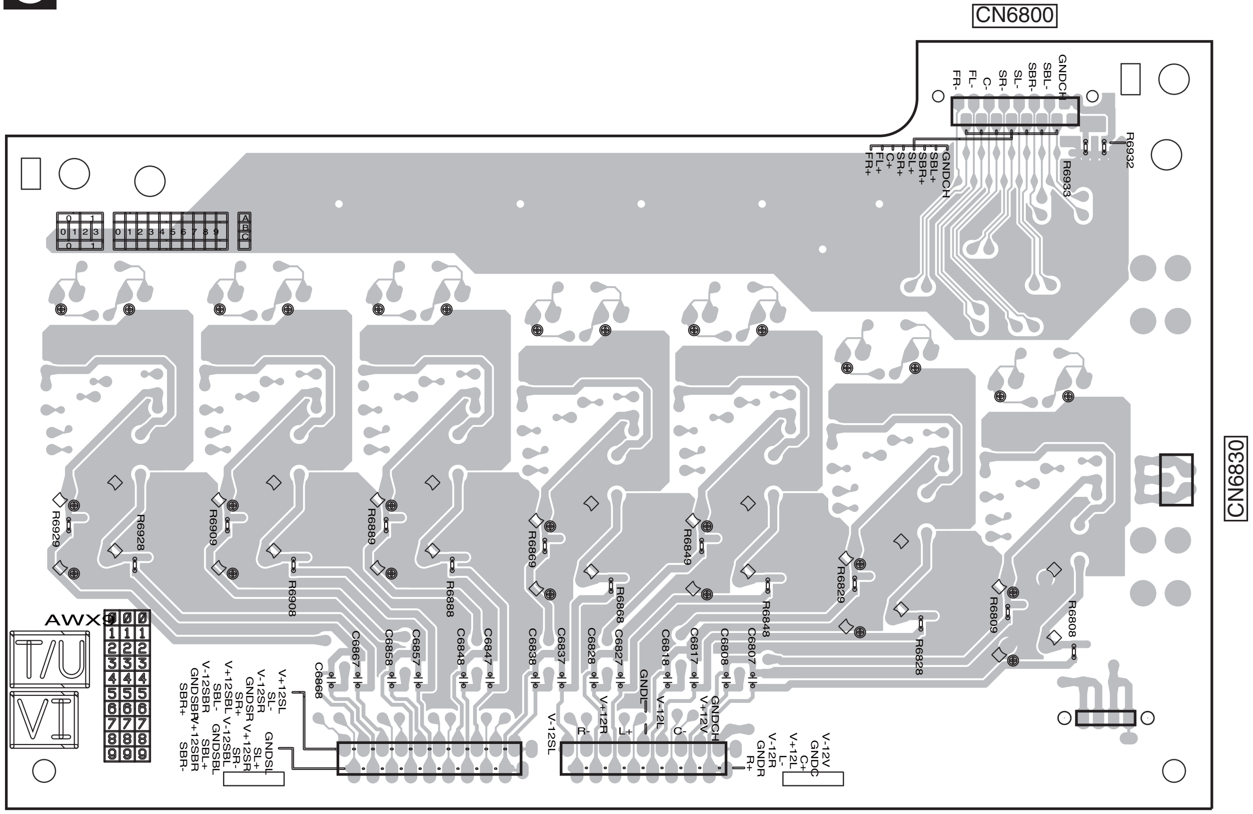
N O R **R O N**

N PRE BRIDGE ASSY


CN6953
CN6952
CN6951
PRE BRIDGE ASSY
GNDCH
GNDCH
SBLOUT
SBROUT
GNDA
GNDA
GNDA
S OUT
L OUT
GNDA
C OUT
C OUT
FL OUT
GNDA
GNDA
FR OUT
GNDA
1
16
21
19
LF

(ANP7652-C)

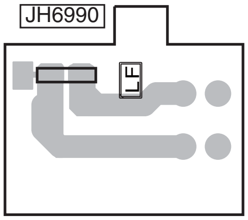
O ICE BUFFER ASSY


CN6800
GNDCH
SBL-
SBR-
SL-
SR-
C-
FL-
FR-
GNDCH
SBL+
SBR+
SL+
SR+
C+
FL+
FR+
R6932
R6933
CN6830
R6929
R6928
R6909
R6908
R6889
R6888
R6869
R6868
R6849
R6848
R6829
R6828
R6809
R6808
C6868
C6867
C6858
C6857
C6848
C6847
C6838
C6837
C6828
C6827
C6818
C6817
C6808
C6807
AWX
T/U
VI
V+12SL
SL-
V-12SR
GNDSR
SR+
V+12SBL
SBL-
V-12SBR
GNDSBR
SBR+
GNDSL
SL+
V+12SR
SR-
V-12SBL
GNDSBL
SBL+
V+12SBR
SBR-
V-12SL
R-
V+12R
L+
GNDL
V-12L
C-
GNDCH
V+12V
V-12V
GNDC
C+
V+12L
L-
V-12R
GNDR
R+

CN6810 CN6820 JH6800

(ANP7652-C)

R ICE SHIELD ASSY

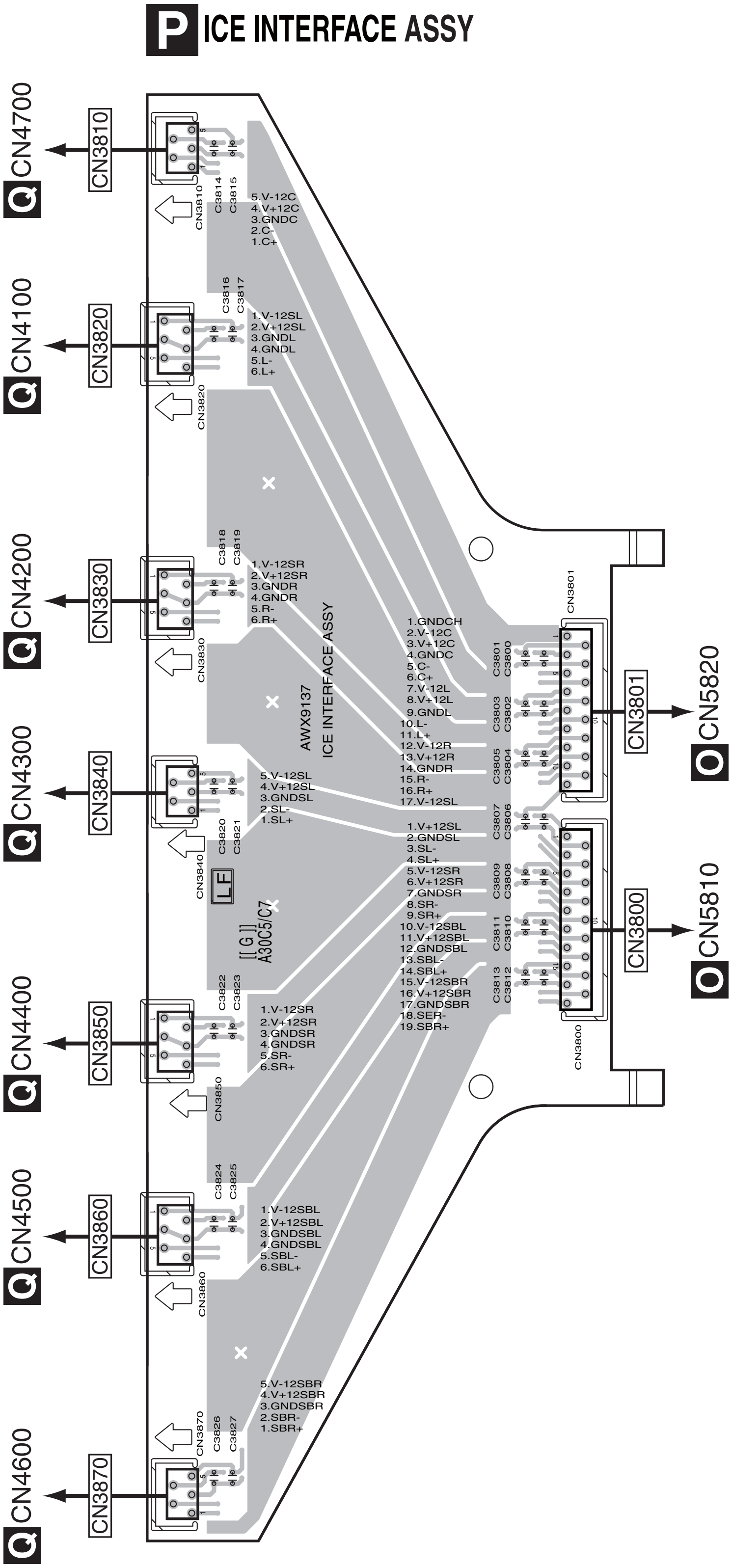


(ANP7652-C)

11.12 ICE INTERFACE ASSY

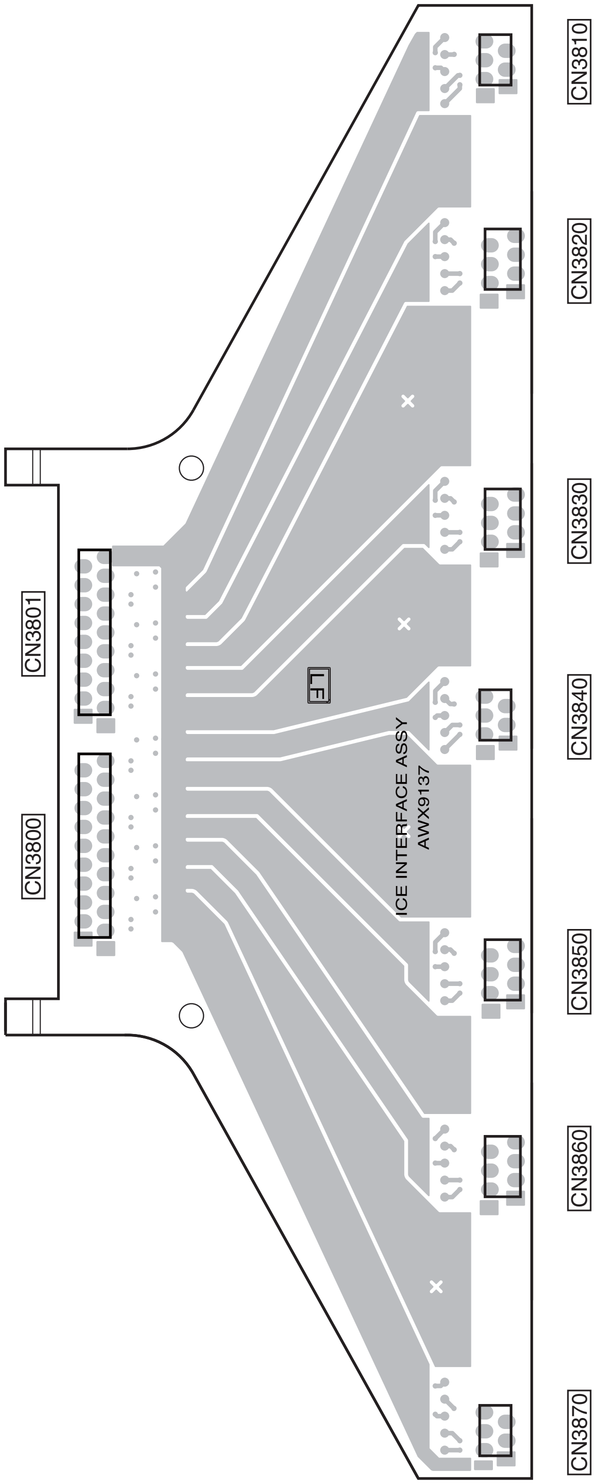
SIDE A

SIDE A


P ICE INTERFACE ASSY
Q CN4700
CN3810
Q CN4100
CN3820
Q CN4200
CN3830
Q CN4300
CN3840
Q CN4400
CN3850
Q CN4500
CN3860
Q CN4600
CN3870
O CN5820
CN3801
O CN5810
CN3800
C3814 C3815
5.V-12C
4.V+12C
3.GNDC
2.C-
1.C+
C3816 C3817
1.V-12SL
2.V+12SL
3.GNDL
4.GNDL
5.L-
6.L+
C3818 C3819
1.V-12SR
2.V+12SR
3.GNDR
4.GNDR
5.R-
6.R+
5.V-12SL
4.V+12SL
3.GNDSL
2.SL-
1.SL+
C3820 C3821
C3822 C3823
1.V-12SR
2.V+12SR
3.GNDSR
4.GNDSR
5.SR-
6.SR+
C3824 C3825
1.V-12SBL
2.V+12SBL
3.GNDSBL
4.GNDSBL
5.SBL-
6.SBL+
5.V-12SBR
4.V+12SBR
3.GNDSBR
2.SBR-
1.SBR+
C3826 C3827
1.GNDCH
2.V-12C
3.V+12C
4.GNDC
5.C-
6.C+
7.V-12L
8.V+12L
9.GNDL
10.L-
11.L+
12.V-12R
13.V+12R
14.GNDR
15.R-
16.R+
17.V-12SL
1.V+12SL
2.GNDSL
3.SL-
4.SL+
5.V-12SR
6.V+12SR
7.GNDSR
8.SR-
9.SR+
10.V-12SBL
11.V+12SBL
12.GNDSBL
13.SBL-
14.SBL+
15.V-12SBR
16.V+12SBR
17.GNDSBR
18.SER-
19.SBR+
C3801 C3800
C3803 C3802
C3805 C3804
C3807 C3806
C3809 C3808
C3811 C3810
C3813 C3812
AWX9137
ICE INTERFACE ASSY
LF
[[G]]
A30C5/C7

(ANP7649-B)

P ICE INTERFACE ASSY


CN3810
CN3820
CN3830
CN3840
CN3850
CN3860
CN3870
CN3801
CN3800
LF
ICE INTERFACE ASSY
AWX9137

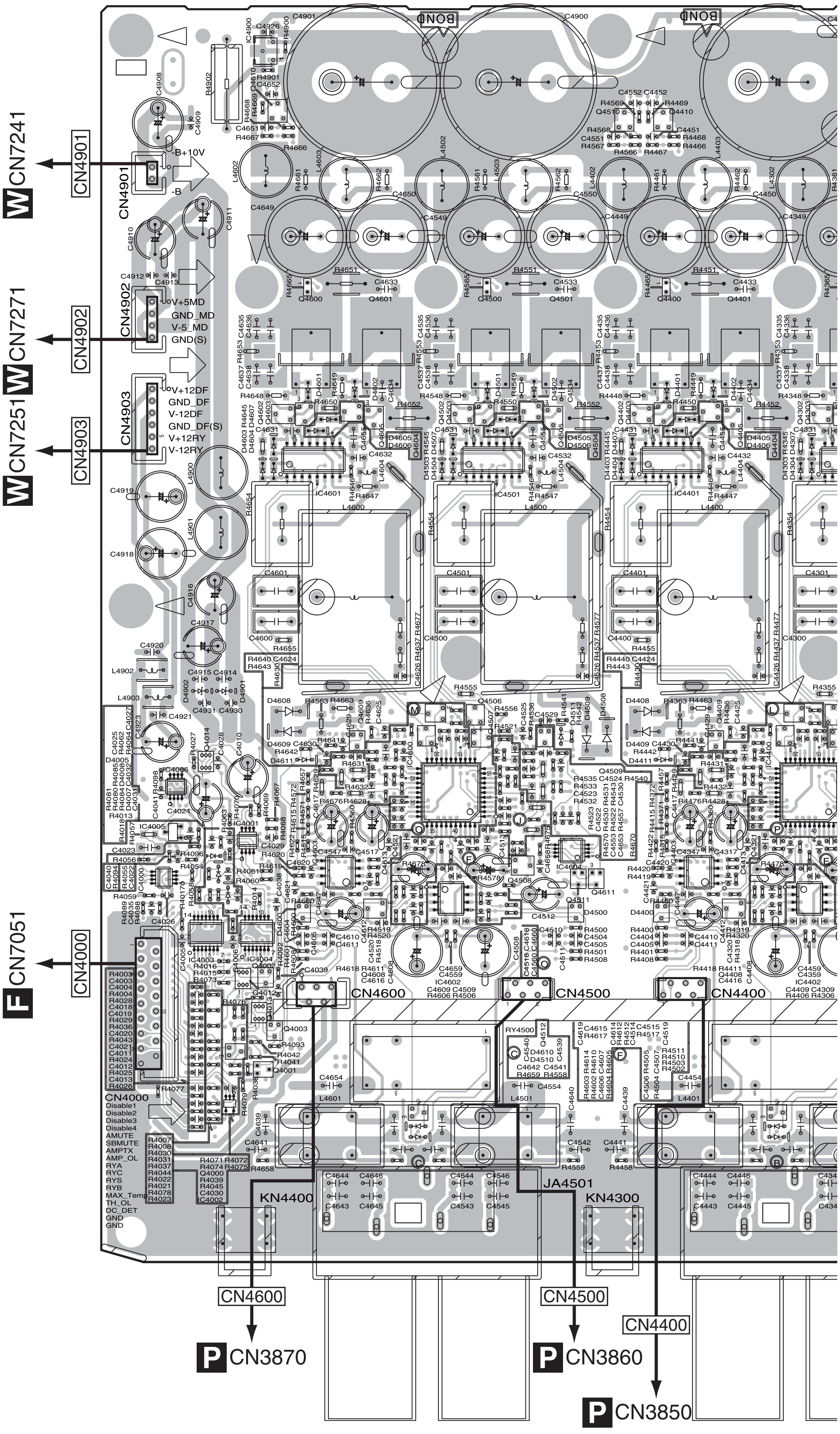
(ANP7649-B)

11.13 ICEPOWER AMP ASSY

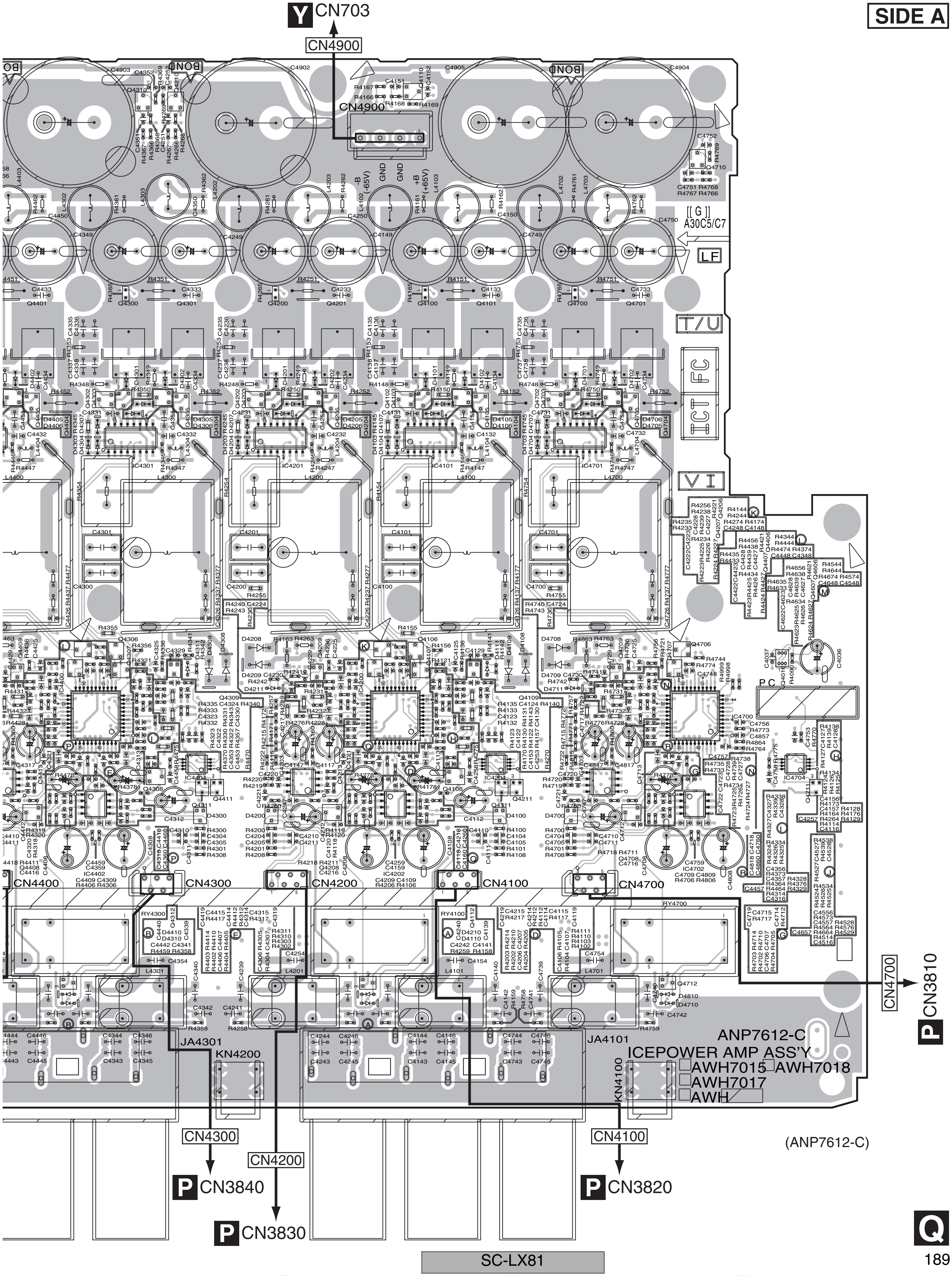
SIDE A

IC	Q
	Q4110
IC4900	Q4210
	Q4310
	Q4610
	Q4510 Q4410
	Q4710
	Q4500 Q4400 Q4300 Q4200
	Q4100 Q4101 Q4700 Q4701
	Q4501 Q4401 Q4301 Q4201
	Q4601 Q4600
	Q4603 Q4602
	Q4403 Q4202 Q4103 Q4502
	Q4402 Q4303 Q4102 Q4702
	Q4503 Q4302 Q4203 Q4703
	Q4605 Q4505 Q4405
	Q4305 Q4205 Q4105 Q4705
	Q4304 Q4204 Q4104 Q4704
	Q4604 Q4504 Q4404
IC4601	
IC4401 IC4201	
IC4101 IC4701	
IC4501 IC4301	
	Q4206
	Q4207
	Q4406
	Q4407
	Q4606
	Q4607
	Q4506 Q4306 Q4106 Q4707
	Q4609 Q4409 Q4209 Q4709
	Q4507 Q4307 Q4107 Q4706
	Q4014 Q4016
IC4600	
IC4400 IC4200	
IC4006	Q4509 Q4309 Q4109
IC4700	
IC4005 IC4001	
IC4603	
IC4203 IC4703	
IC4403 IC4404	
IC4204 IC4704	Q4508 Q4308 Q4108 Q4711
IC4604 IC4000	Q4611 Q4411 Q4211
	Q4511 Q4311 Q4111
IC4003 IC4004	
IC4602 IC4702	Q4002 Q4708
IC4402 IC4202	Q4608 Q4408 Q4208
	Q4012
	Q4013
	Q4003 Q4512 Q4312 Q4112
	Q4001
	Q4712
	Q4000
IC4002	

Q ICEPOWER AMP ASSY


W CN7241
CN4901
+B+10V
-B
W CN7271
CN4902
V+5MD
GND_MD
V-5_MD
GND(S)
W CN7251
W
CN4903
V+12DF
GND_DF
V-12DF
GND_DF(S)
V+12RY
V-12RY
F CN7051
CN4000
CN4000
Disable1
Disable2
Disable3
Disable4
AMUTE
SBMUTE
AMPTX
AMP_OL
RYA
RYC
RYS
RYB
MAX_Temp
TH_OL
DC_DET
GND
GND
BOND
BOND
CN4600
CN4500
CN4400
KN4400
JA4501
KN4300
CN4600
P CN3870
CN4500
P CN3860
CN4400
P CN3850

SIDE A

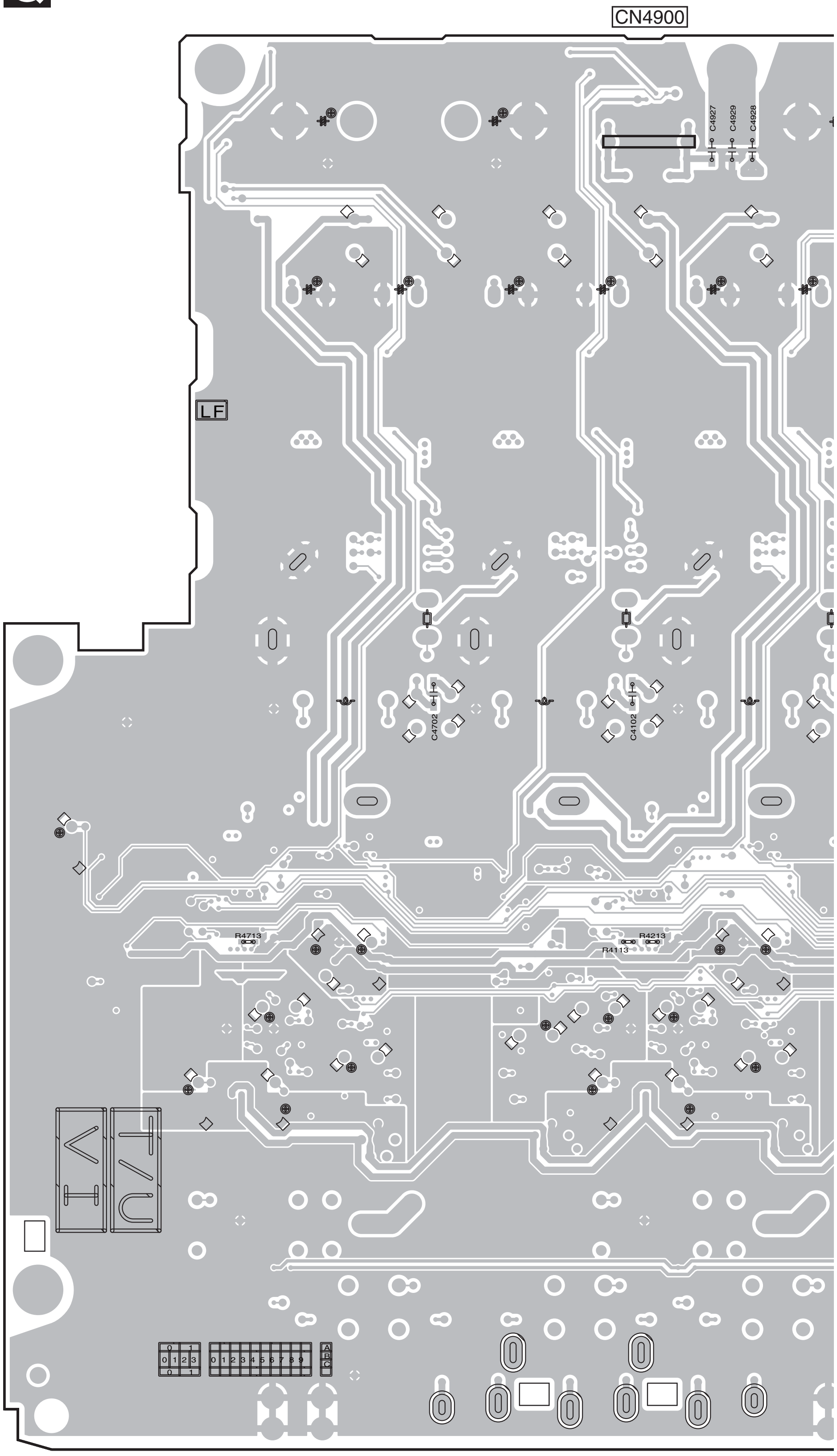

Y CN703
CN4900
CN4900
-B (-65V)
GND
GND
+B (+65V)
C4903
C4902
C4905
C4904
BOND
[[G]]
A30C5/C7
LF
T/U
FC
ICT
VI
PC
IC4301
IC4201
IC4101
IC4701
L4400
L4300
L4200
L4100
L4700
C4301
C4201
C4101
C4701
CN4400
CN4300
CN4200
CN4100
CN4700
RY4300
RY4100
RY4700
JA4301
JA4101
KN4200
KN4100
ANP7612-C
ICEPOWER AMP ASS'Y
☐AWH7015 ☐AWH7018
☐AWH7017
☐AWH
(ANP7612-C)
CN4700
P CN3810
CN4300
P CN3840
CN4200
P CN3830
CN4100
P CN3820

SIDE B

A

IC Q

Q ICEPOWER AMP ASSY


CN4900
C4927
C4929
C4928
LF
C4702
C4102
R4713
R4213
R4113
A
B
C

B

C

D

Q4015

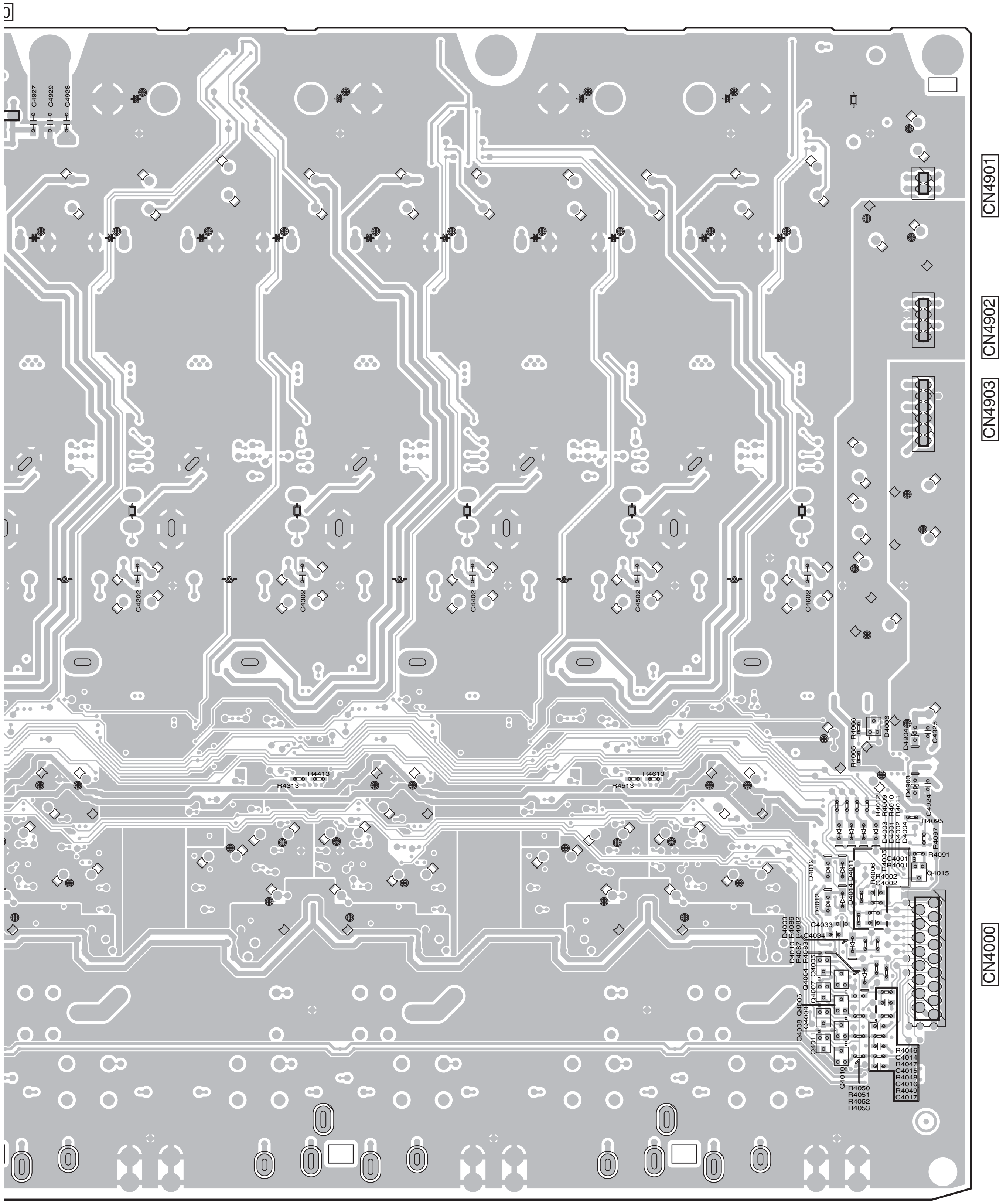
Q4004
Q4007
Q4006
Q4009 Q4011Q4005
Q4008

E

Q4010

F

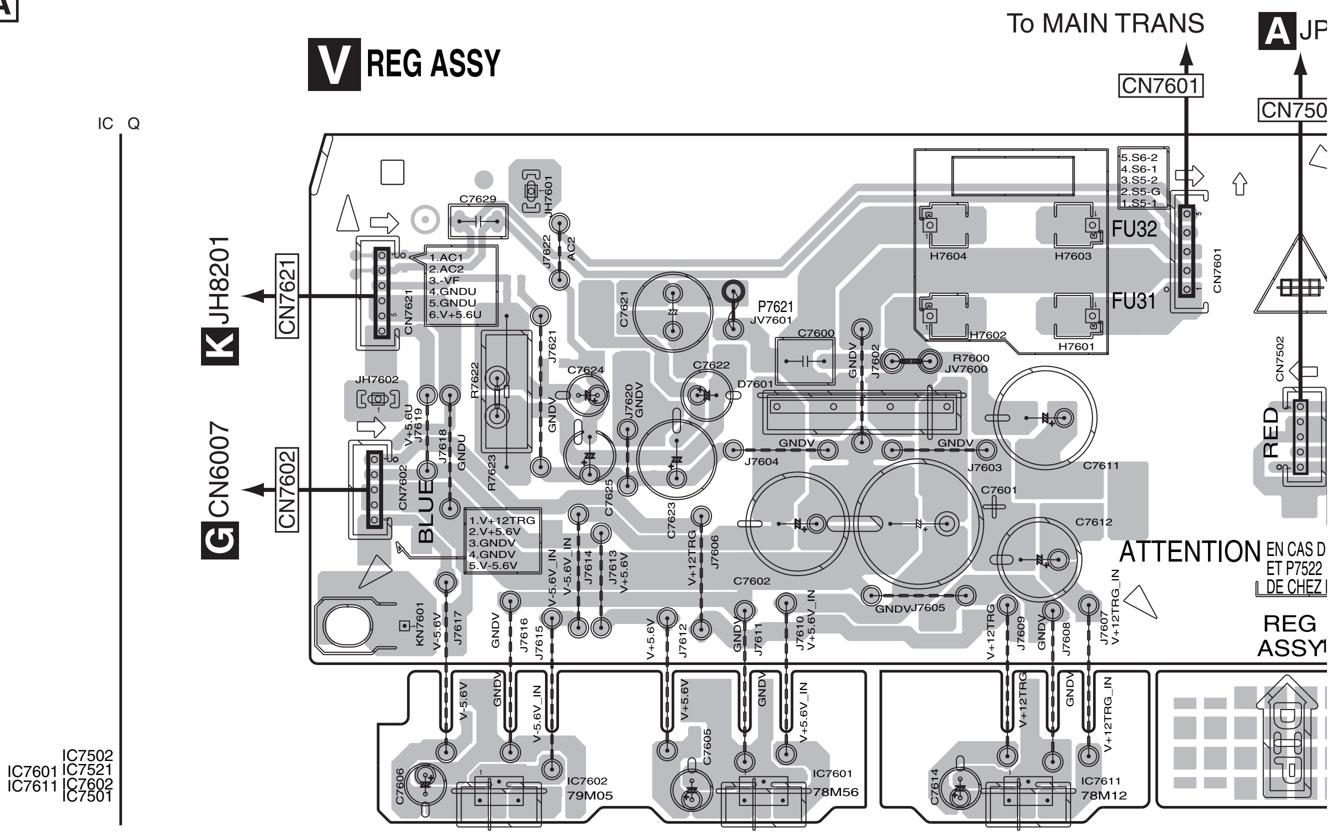
SIDE B

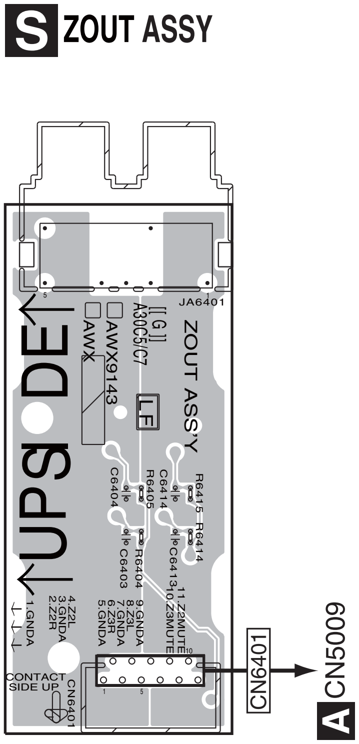

C4927
C4929
C4928
CN4901
CN4902
CN4903
CN4000
C4202
C4302
C4402
C4502
C4602
R4413
R4313
R4613
R4513
R4066
R4065
D4006
D4904
C4925
D4903
C4924
R4012
R4009
R4010
R4011
R4095
D4003
D4001
D4002
D4004
R4097
R4091
R4005
C4001
R4001
Q4015
R4006
R4002
C4002
D4012
D4011
D4014
D4013
C4033
C4034
D4009
R4086
R4082
D4010
R4087
R4083
Q4005
Q4004
Q4007
Q4006
Q4009
Q4008
Q4011
Q4010
R4046
C4014
R4047
C4015
R4048
C4016
R4049
C4017
R4050
R4051
R4052
R4053

(ANP7612-C)

11.14 ZOUT, PRIMARY GUARD and REG ASSYS

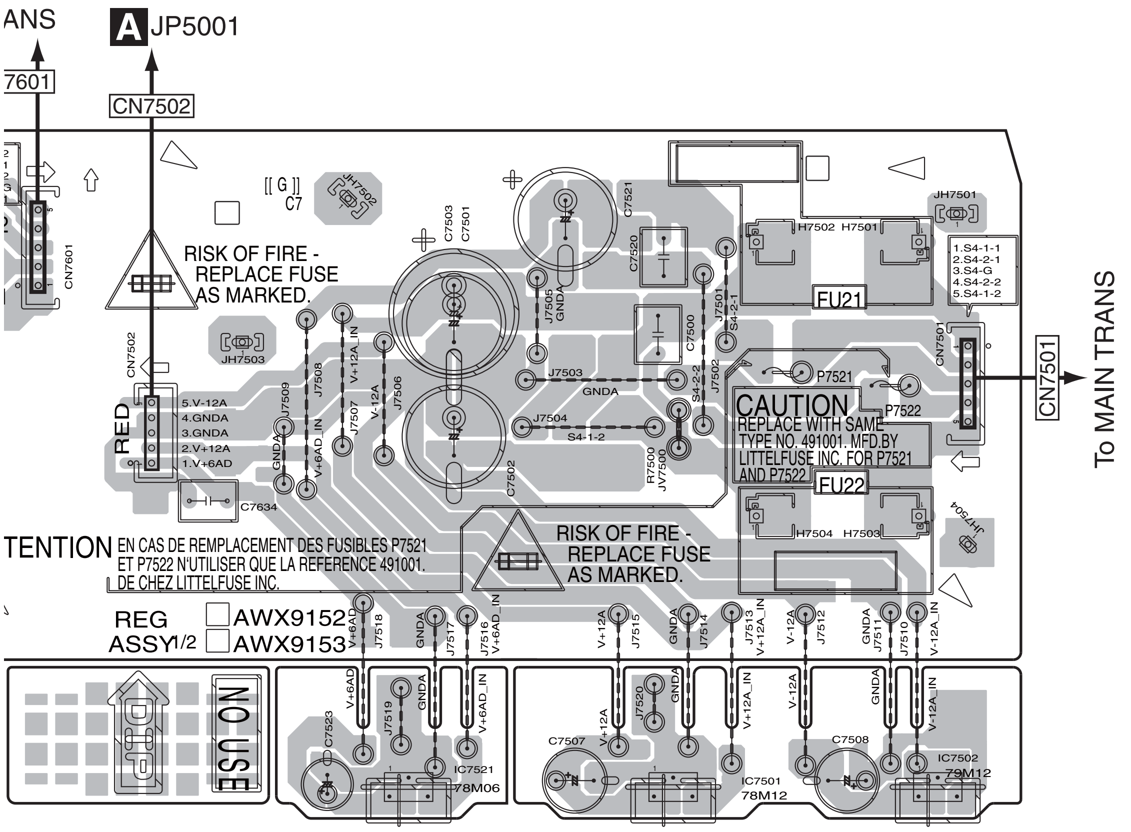
SIDE A


V REG ASSY
To MAIN TRANS
CN7601
A JP
CN750
IC Q
IC7502
IC7601 IC7521
IC7611 IC7602
IC7501
K JH8201
CN7621
G CN6007
CN7602
1.AC1
2.AC2
3.-VF
4.GNDU
5.GNDU
6.V+5.6U
C7629
H7601
J7622
AC2
C7621
P7621
JV7601
C7600
GNDV
J7602
R7600
JV7600
5.S6-2
4.S6-1
3.S5-2
2.S5-G
1.S5-1
FU32
FU31
H7604
H7603
H7602
H7601
CN7601
CN7502
RED
JH7602
V+5.6U
J7619
J7618
GNDU
R7622
R7623
J7621
C7624
GNDV
J7620
C7622
D7601
C7625
C7623
J7604
J7603
C7601
C7611
C7612
BLUE
1.V+12TRG
2.V+5.6V
3.GNDV
4.GNDV
5.V-5.6V
V-5.6V_IN
J7614
J7613
V+5.6V
V+12TRG
J7606
C7602
GNDV J7605
V+5.6V_IN
V+12TRG_IN
ATTENTION EN CAS D
ET P7522
DE CHEZ
REG ASSY
KN7601
V-5.6V
J7617
J7616
J7615
J7612
J7611
J7610
J7609
J7608
J7607
C7606
IC7602
79M05
C7605
IC7601
78M56
C7614
IC7611
78M12


S ZOUT ASSY
JA6401
ZOUT ASS'Y
[[G]]
A30C5/C7
AWX9143
AWX
LF
UPSIDE
C6404
R6405
C6414
R6415
R6414
C6403
R6404
C6413
1.GNDA
2.Z2R
3.GNDA
4.Z2L
5.GNDA
6.Z3R
7.GNDA
8.Z3L
9.GNDA
10.Z3MUTE
11.Z2MUTE
CONTACT SIDE UP
CN6401
A CN5009

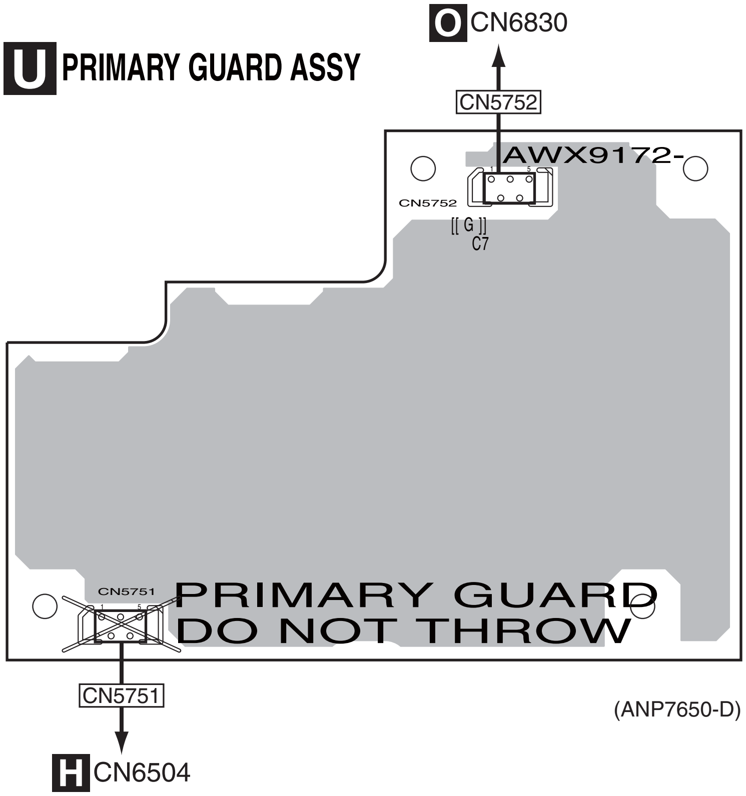
(ANP7651-B)

SIDE A


ANS
7601
A JP5001
CN7502
CN7601
RISK OF FIRE - REPLACE FUSE AS MARKED.
[[G]] C7
JH7502
JH7503
JH7501
C7503
C7501
C7521
C7520
C7500
C7502
C7634
H7502 H7501
H7504 H7503
FU21
FU22
1.S4-1-1
2.S4-2-1
3.S4-G
4.S4-2-2
5.S4-1-2
CN7501
To MAIN TRANS
P7521
P7522
CAUTION
REPLACE WITH SAME TYPE NO. 491001. MFD.BY LITTELFUSE INC. FOR P7521 AND P7522
RED
5.V-12A
4.GNDA
3.GNDA
2.V+12A
1.V+6AD
J7503
J7504
J7505
J7506
J7507
J7508
J7509
J7501
J7502
S4-1-2
S4-2-1
S4-2-2
R7500
JV7500
JH7504
GNDA
V+12A_IN
V-12A
V+6AD_IN
ATTENTION EN CAS DE REMPLACEMENT DES FUSIBLES P7521 ET P7522 N'UTILISER QUE LA REFERENCE 491001. DE CHEZ LITTELFUSE INC.
RISK OF FIRE - REPLACE FUSE AS MARKED.
REG ASSY 1/2
☐ AWX9152
☐ AWX9153
V+6AD
J7518
J7517
J7516
J7515
J7514
J7513
J7512
J7511
J7510
J7519
J7520
V+12A
V-12A_IN
NO USE
DIP
C7523
C7507
C7508
IC7521 78M06
IC7501 78M12
IC7502 79M12

(ANP7654-B)

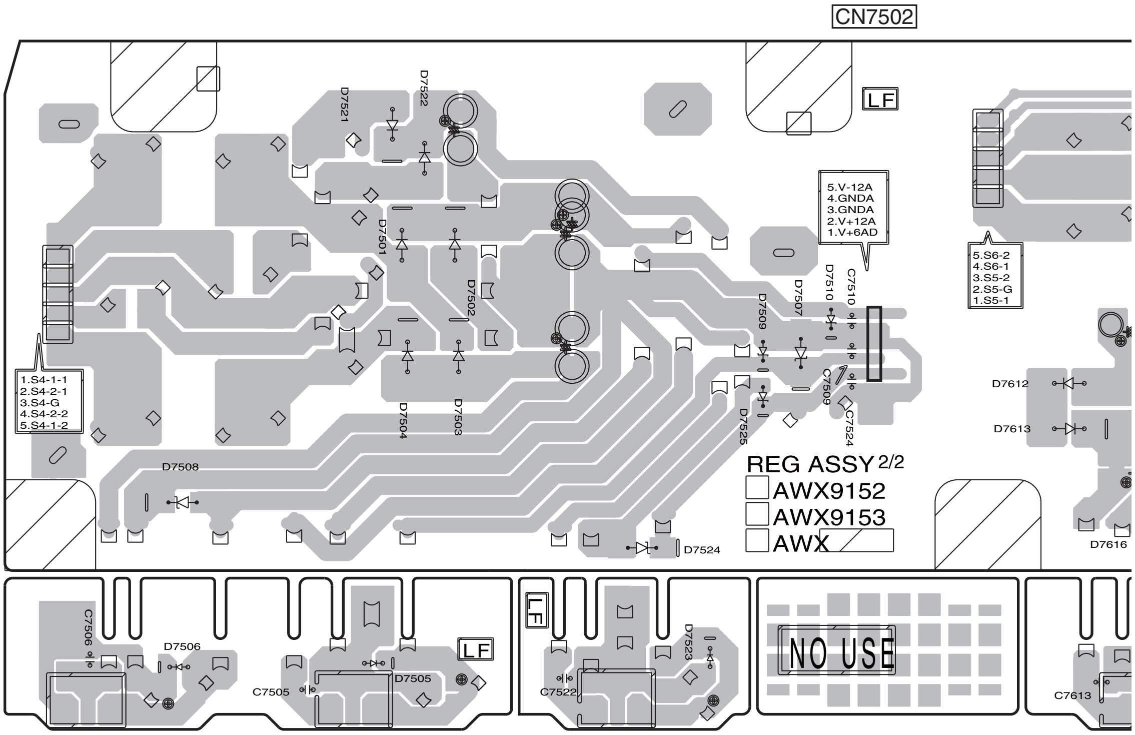
U PRIMARY GUARD ASSY


O CN6830
CN5752
AWX9172-
CN5752
[[G]] C7
CN5751
PRIMARY GUARD DO NOT THROW
CN5751
H CN6504

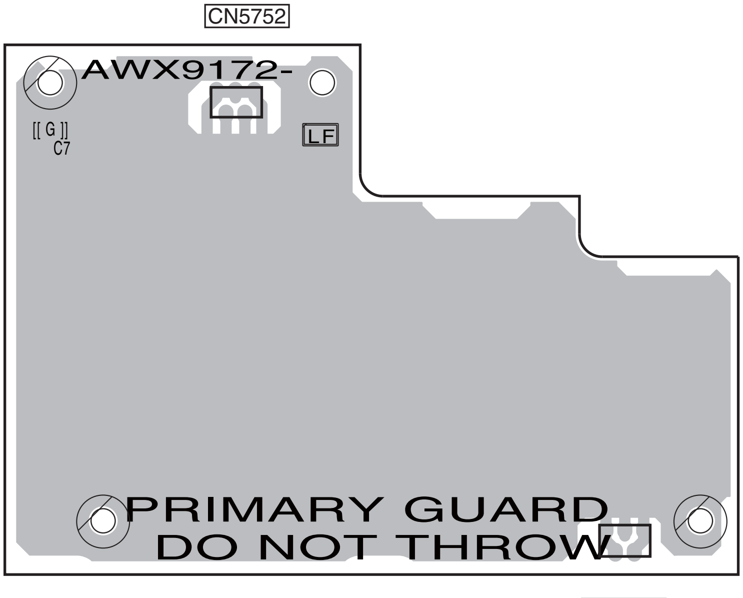
(ANP7650-D)

SIDE B

V REG ASSY

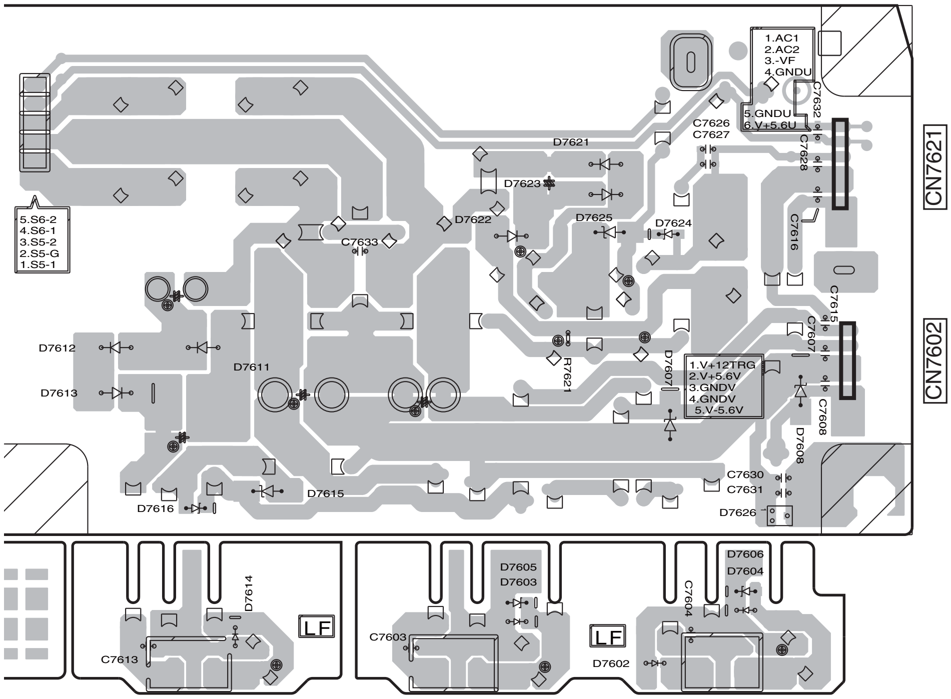

CN7502
LF
D7521
D7522
5.V-12A
4.GNDA
3.GNDA
2.V+12A
1.V+6AD
5.S6-2
4.S6-1
3.S5-2
2.S5-G
1.S5-1
D7501
D7502
D7509
D7507
D7510
C7510
C7509
C7524
D7525
D7504
D7503
1.S4-1-1
2.S4-2-1
3.S4-G
4.S4-2-2
5.S4-1-2
D7508
D7612
D7613
D7616
D7524
REG ASSY 2/2
AWX9152
AWX9153
AWX
C7506
D7506
C7505
D7505
LF
LF
C7522
D7523
NO USE
C7613

U PRIMARY GUARD ASSY


CN5752
AWX9172-
[[G]]
C7
LF
PRIMARY GUARD
DO NOT THROW
CN5751

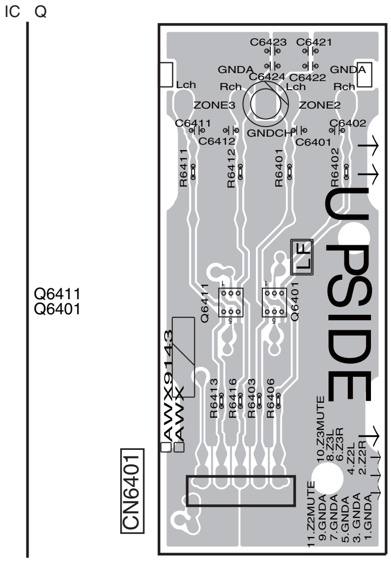
(ANP7650-D)

SIDE B


1.AC1
2.AC2
3.-VF
4.GNDU
5.GNDU
6.V+5.6U
C7632
C7626
C7627
C7628
CN7621
D7621
D7623
D7622
D7625
D7624
C7633
C7616
C7615
C7607
CN7602
5.S6-2
4.S6-1
3.S5-2
2.S5-G
1.S5-1
D7612
D7611
D7613
R7621
D7607
1.V+12TRG
2.V+5.6V
3.GNDV
4.GNDV
5.V-5.6V
C7608
D7608
C7630
C7631
D7626
D7615
D7616
D7614
LF
C7613
D7605
D7603
C7603
LF
D7602
C7604
D7606
D7604

(ANP7654-B)

S ZOUT ASSY

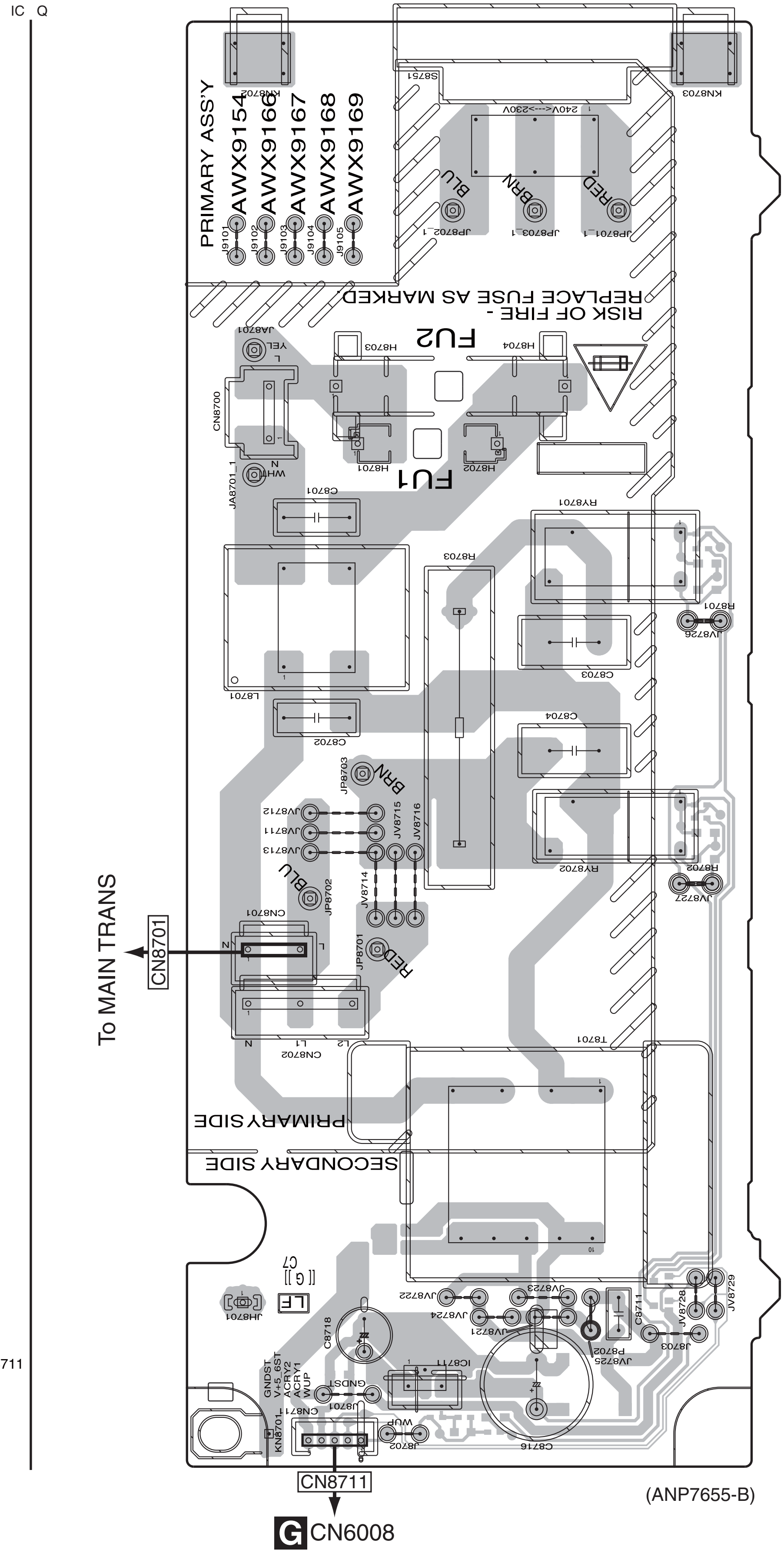

IC Q
Q6411
Q6401
C6423
C6421
GNDA
C6424
C6422
GNDA
Lch
Rch
Lch
Rch
ZONE3
ZONE2
C6411
C6412
GNDCH
C6401
C6402
R6411
R6412
R6401
R6402
UPSIDE
LF
Q6411
Q6401
AWX9143
AWX
R6413
R6416
R6403
R6406
10.Z3MUTE
8.Z3L
6.Z3R
4.Z2L
2.Z2R
11.Z2MUTE
9.GNDA
7.GNDA
5.GNDA
3.GNDA
1.GNDA
CN6401

(ANP7651-B)

11.15 PRIMARY ASSY

SIDE A **SIDE A**

T PRIMARY ASSY


IC Q
IC8711
PRIMARY ASS'Y
AWX9154
AWX9166
AWX9167
AWX9168
AWX9169
J9101
J9102
J9103
J9104
J9105
KN8702
KN8703
S8751
240V<--->230V
BLU
BRN
RED
JP8701_1
JP8702_1
JP8703_1
RISK OF FIRE -
REPLACE FUSE AS MARKED
FU1
FU2
H8701
H8702
H8703
H8704
JA8701
YEL
CN8700
JA8701_1
WHT
C8701
C8702
C8703
C8704
L8701
R8701
R8702
R8703
RY8701
RY8702
JV8726
JV8727
JP8701
JP8702
JP8703
JV8711
JV8712
JV8713
JV8714
JV8715
JV8716
CN8701
CN8702
To MAIN TRANS
T8701
PRIMARY SIDE
SECONDARY SIDE
C7
[[G]]
LF
JH8701
C8711
C8716
C8718
IC8711
JV8721
JV8722
JV8723
JV8724
JV8725
JV8728
JV8729
J8701
J8702
J8703
P8702
GNDST
V+5_6ST
ACRY2
ACRY1
WUP
KN8701
CN8711
(ANP7655-B)
G CN6008

SIDE B

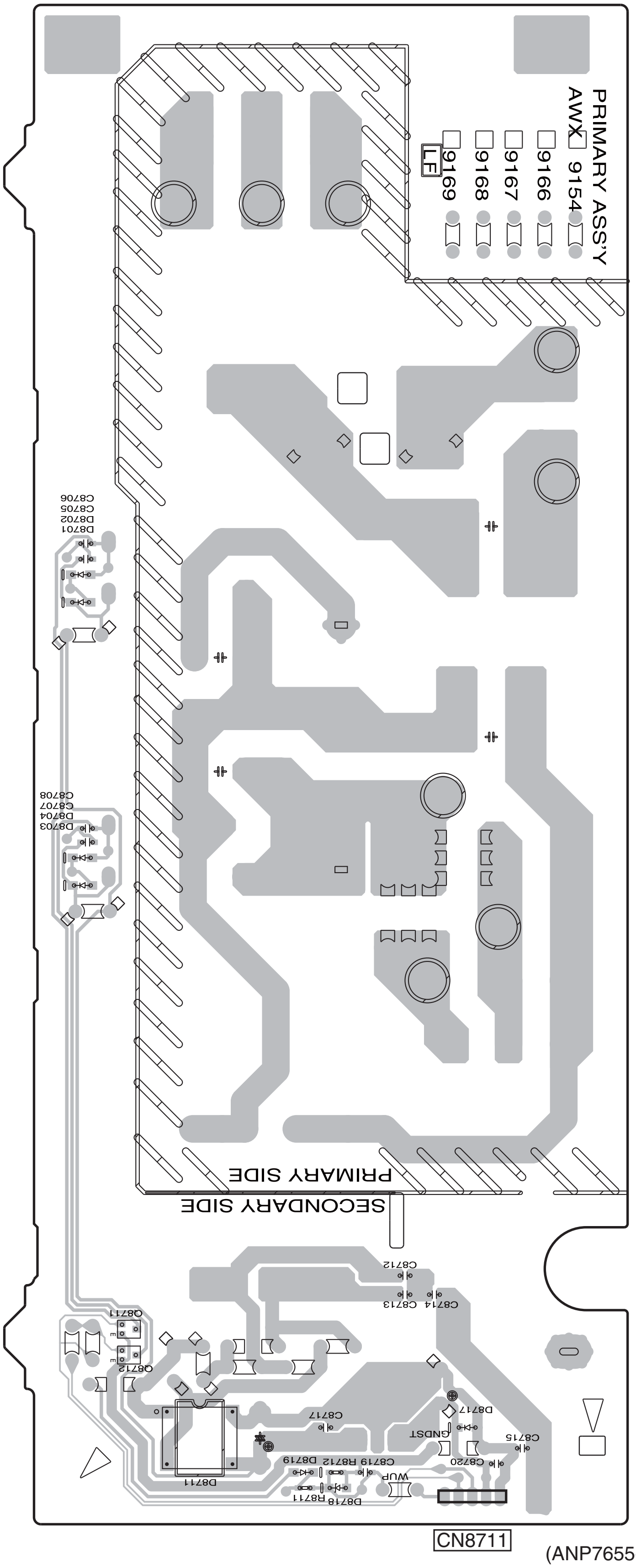
SIDE B

T PRIMARY ASSY

IC Q

Q8711

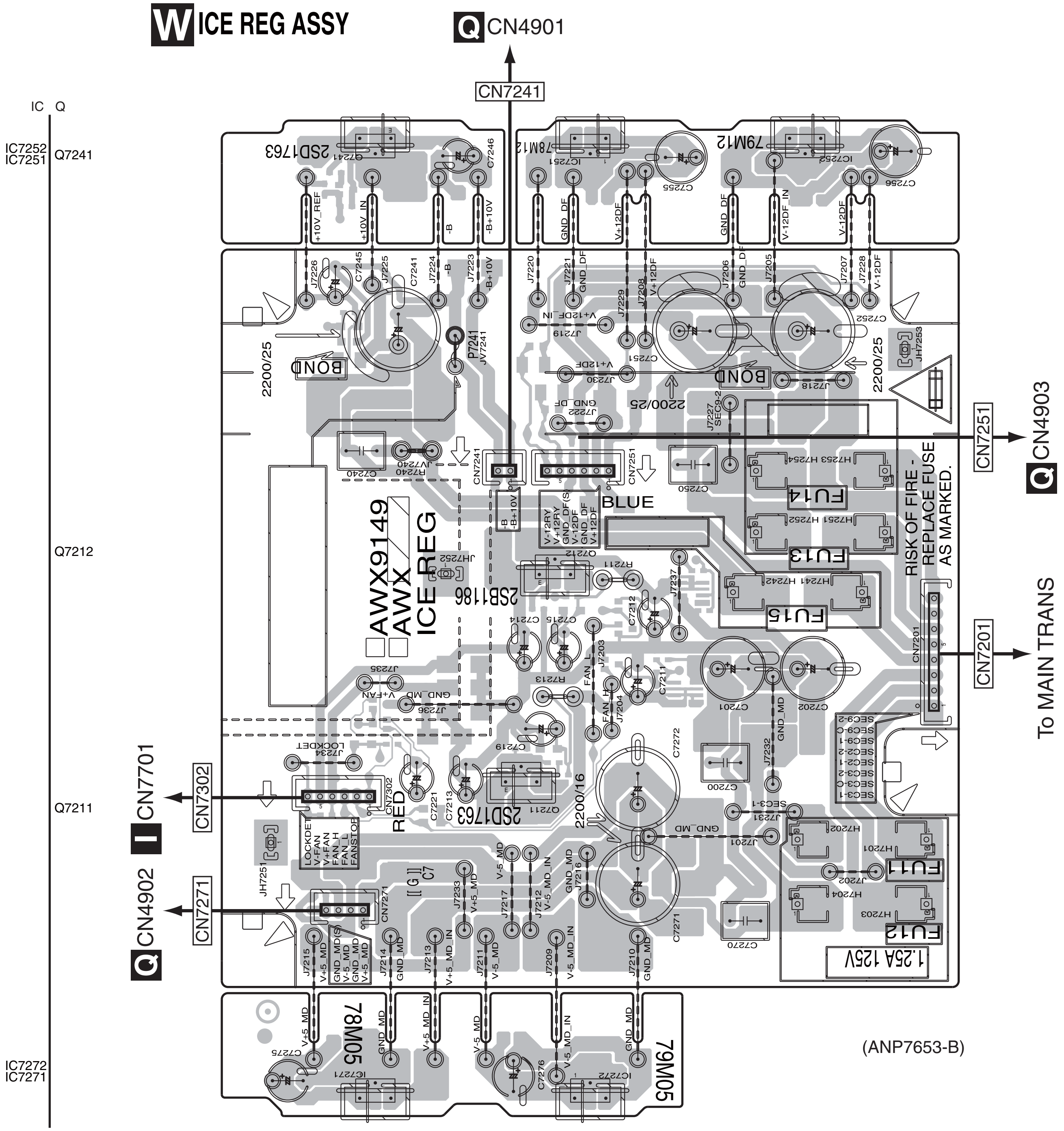
Q8712


PRIMARY ASS'Y
AWX 9154
9166
9167
9168
9169
LF
C8706
C8705
D8702
D8701
C8708
C8707
D8704
D8703
PRIMARY SIDE
SECONDARY SIDE
C8712
C8714
C8713
Q8711
Q8712
D8717
C8717
GNDST
C8715
C8720
C8719
R8712
D8719
WUP
R8711
D8718
D8711
CN8711

(ANP7655-B)

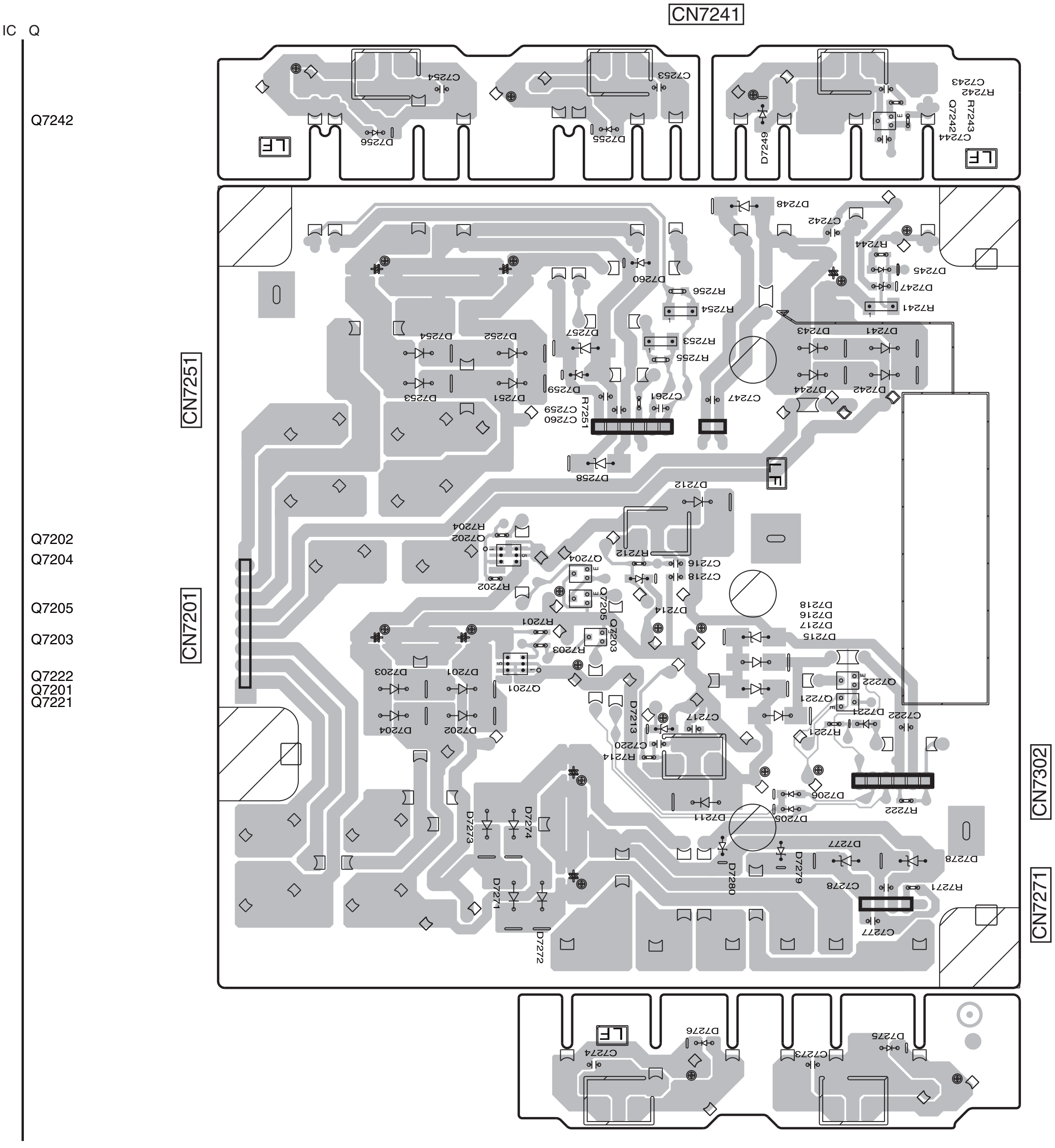
11.16 ICE REG ASSY

SIDE A **SIDE A**


W ICE REG ASSY
Q CN4901
CN7241
IC Q
IC7252
IC7251
Q7241
Q7212
Q7211
IC7272
IC7271
2SD1763
78M12
79M12
+10V_REF
+10V_IN
-B
-B+10V
GND_DF
V+12DF
V-12DF
V-12DF_IN
C7246
C7255
C7256
J7226
C7245
J7225
C7241
J7224
J7223
J7220
J7221
J7229
J7208
J7206
J7205
J7207
J7228
J7219
V+12DF_IN
P7241
JV7241
2200/25
BOND
C7251
C7252
JH7253
J7230
J7222
J7218
J7227
SEC9-2
CN7251
Q CN4903
C7240
JV7240
CN7241
BLUE
C7250
H7253 H7254
FU14
H7251 H7252
FU13
RISK OF FIRE - REPLACE FUSE AS MARKED.
AWX9149
AWX
ICE REG
JH7252
2SB1186
Q7212
R7211
J7237
H7241 H7242
FU15
-B
-B+10V
V-12RY
V+12RY
GND_DF(S)
V-12DF
GND_DF
V+12DF
C7214
C7215
C7212
R7213
J7203
FAN_L
FAN_H
J7204
C7211
C7201
C7202
CN7201
To MAIN TRANS
J7235
V+FAN
GND_MD
J7236
C7219
C7272
J7232
GND_MD
SEC9-2
SEC9-C
SEC9-1
SEC2-2
SEC2-1
SEC3-2
SEC3-C
SEC3-1
J7234
LOCKDET
CN7701
CN7302
I
C7221
C7213
2SD1763
Q7211
2200/16
C7200
J7231
SEC3-1
J7201
GND_MD
RED
LOCKDET
V-FAN
V+FAN
FAN_H
FAN_L
FANSTOP
JH7251
[[G]] C7
V-5_MD
V+5_MD
V-5_MD_IN
J7233
J7217
J7212
J7216
H7202
H7201
FU11
J7202
H7204
H7203
FU12
CN4902
Q
CN7271
C7271
C7270
J7215
J7214
J7213
J7211
J7209
J7210
GND_MD(S)
V-5_MD
GND_MD
V+5_MD
V+5_MD_IN
V-5_MD_IN
1.25A 125V
78M05
79M05
C7275
IC7271
C7276
IC7272
(ANP7653-B)

SIDE B **SIDE B**

W ICE REG ASSY

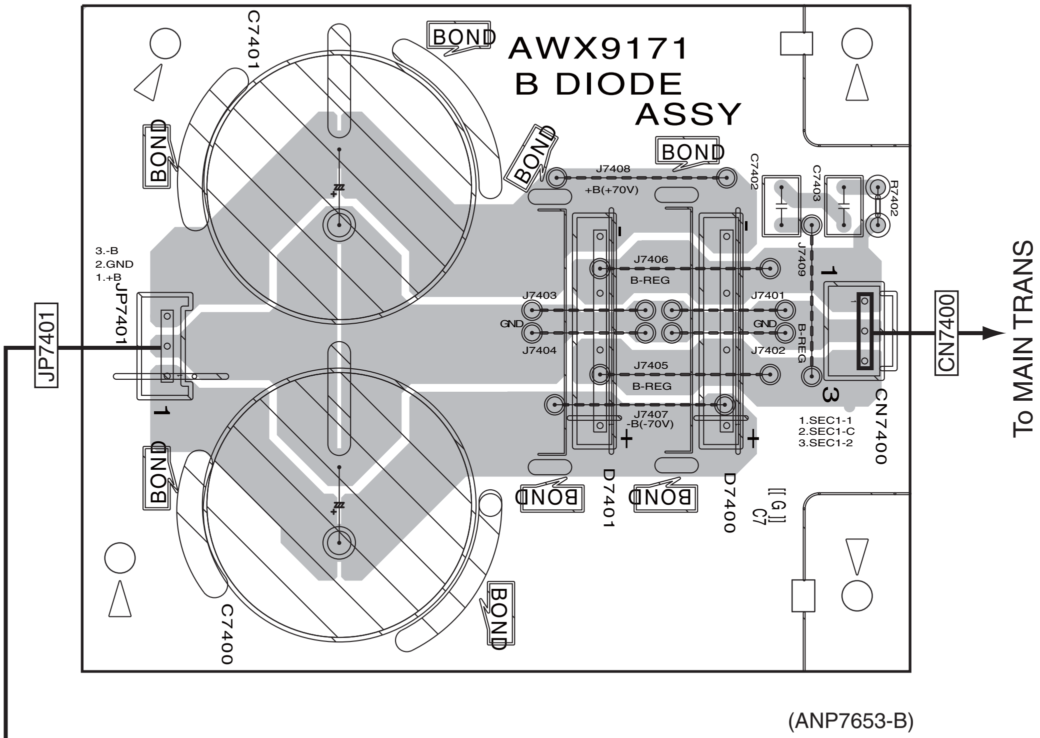

CN7241
IC Q
Q7242
Q7202
Q7204
Q7205
Q7203
Q7222
Q7201
Q7221
CN7251
CN7201
CN7302
CN7271
C7254
C7253
C7243
R7242
R7243
Q7242
C7244
D7256
D7255
D7249
LF
D7248
C7242
R7244
D7245
D7247
R7241
D7260
R7256
R7254
R7253
R7255
D7257
D7254
D7252
D7253
D7251
D7259
C7259
C7260
R7251
C7261
C7247
D7243
D7241
D7244
D7242
D7258
D7212
R7204
Q7202
R7212
Q7204
C7216
C7218
R7202
Q7205
D7214
D7218
D7216
D7217
D7215
R7201
Q7203
R7203
D7203
D7201
Q7201
Q7222
Q7221
D7221
C7222
D7204
D7202
D7213
C7217
R7221
C7220
R7214
D7206
R7222
D7211
D7205
D7274
D7273
D7277
D7278
D7280
D7279
D7271
C7278
R7271
C7277
D7272
D7276
D7275
C7274
C7273

(ANP7653-B)

11.17 B DIODE and B REG ASSYS

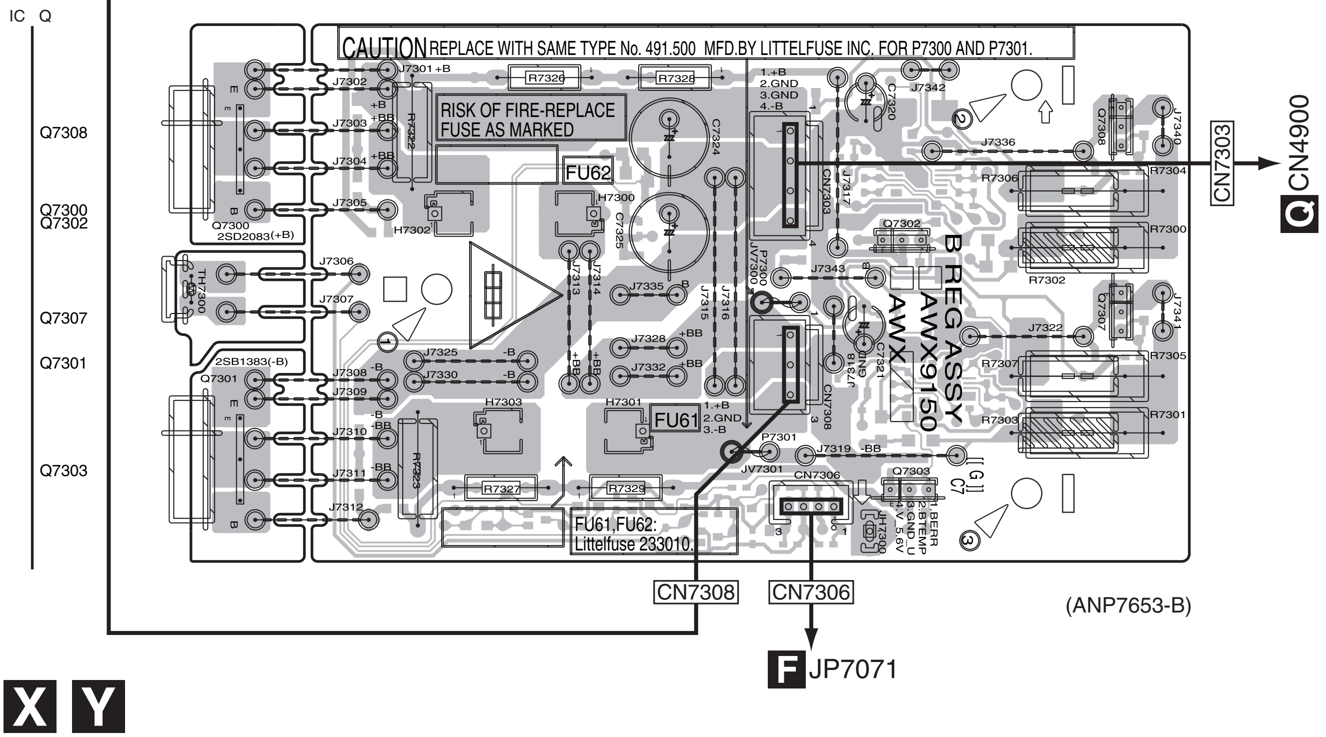
SIDE A

X B DIODE ASSY


AWX9171
B DIODE
ASSY
C7401
C7400
BOND
C7402
C7403
R7402
J7408
+B(+70V)
J7406
B-REG
J7403
GND
J7404
J7405
B-REG
J7407
-B(-70V)
J7401
GND
J7402
B-REG
J7409
D7401
D7400
3.-B
2.GND
1.+B
JP7401
JP7401
1
CN7400
1.SEC1-1
2.SEC1-C
3.SEC1-2
CN7400
To MAIN TRANS
[[G]]
C7
(ANP7653-B)

SIDE A

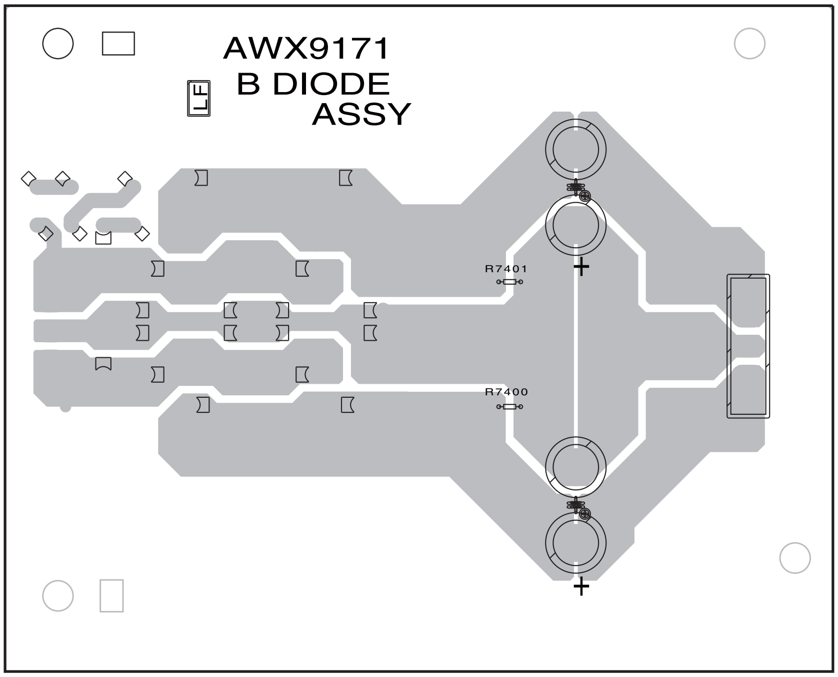
Y B REG ASSY


IC Q
Q7308
Q7300
Q7302
Q7307
Q7301
Q7303
CAUTION REPLACE WITH SAME TYPE No. 491.500 MFD.BY LITTELFUSE INC. FOR P7300 AND P7301.
RISK OF FIRE-REPLACE
FUSE AS MARKED
FU62
FU61
FU61,FU62:
Littelfuse 233010.
B REG ASSY
AWX9150
AWX
J7301 +B
J7302
J7303
J7304
J7305
J7306
J7307
J7308
J7309
J7310
J7311
J7312
Q7300
2SD2083(+B)
2SB1383(-B)
Q7301
TH7300
R7326
R7328
R7322
R7323
R7327
R7329
H7300
H7301
H7302
H7303
C7324
C7325
J7313
J7314
J7315
J7316
J7325
J7330
J7328
J7332
J7335
1.+B
2.GND
3.GND
4.-B
CN7303
CN7308
1.+B
2.GND
3.-B
P7300
JV7300
P7301
JV7301
C7320
J7342
J7336
J7317
Q7302
J7343
J7318
C7321
J7319
CN7306
Q7303
J7300
1.BERR
2.BTEMP
3.GND_U
4.V_5.6V
Q7308
J7340
R7306
R7304
R7300
R7302
Q7307
J7341
J7322
R7307
R7305
R7303
R7301
[[G]]
C7
CN7303
Q CN4900
CN7308
CN7306
F JP7071
(ANP7653-B)

X Y

SIDE B

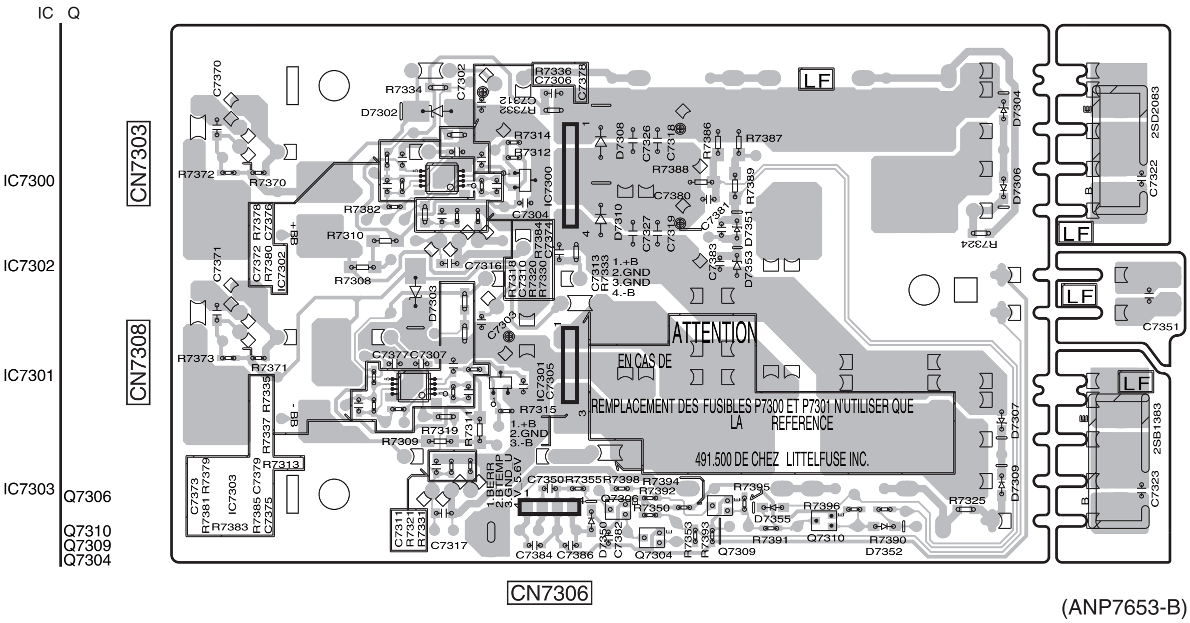
X B DIODE ASSY


AWX9171
B DIODE
ASSY
LF
R7401
R7400
+
+

(ANP7653-B)

SIDE B

Y B REG ASSY


IC Q
IC7300
IC7302
IC7301
IC7303
Q7306
Q7310
Q7309
Q7304
CN7303
CN7308
CN7306
C7370
R7334
C7302
D7302
R7336
C7306
C7378
C7312
R7332
LF
R7314
R7312
IC7300
D7308
C7326
C7318
R7386
R7387
R7388
C7380
R7389
R7372
R7370
R7382
C7304
D7310
C7327
C7319
C7381
D7351
C7383
D7353
R7378
C7376
C7372
R7380
IC7302
+BB
R7310
R7308
C7316
R7384
C7374
R7318
C7310
R7320
R7330
C7313
R7333
1.+B
2.GND
3.GND
4.-B
C7371
D7303
C7303
R7373
R7371
C7377
C7307
IC7301
C7305
R7315
R7335
R7337
-BB
R7319
R7311
R7309
1.+B
2.GND
3.-B
R7313
C7373
R7381
R7379
IC7303
R7383
R7385
C7379
C7375
1.BERR
2.BTEMP
3.GND_U
4.V_5.6V
C7311
R7321
R7331
C7317
C7350
R7355
R7398
R7394
R7392
Q7306
R7350
R7395
D7355
R7396
R7391
Q7310
R7390
D7352
R7325
C7384
C7386
D7350
C7382
Q7304
R7353
R7393
Q7309
ATTENTION
EN CAS DE
REMPLACEMENT DES FUSIBLES P7300 ET P7301 N'UTILISER QUE
LA REFERENCE
491.500 DE CHEZ LITTELFUSE INC.
D7304
2SD2083
D7306
C7322
R7324
E
B
LF
C7351
D7307
2SB1383
D7309
C7323

(ANP7653-B)

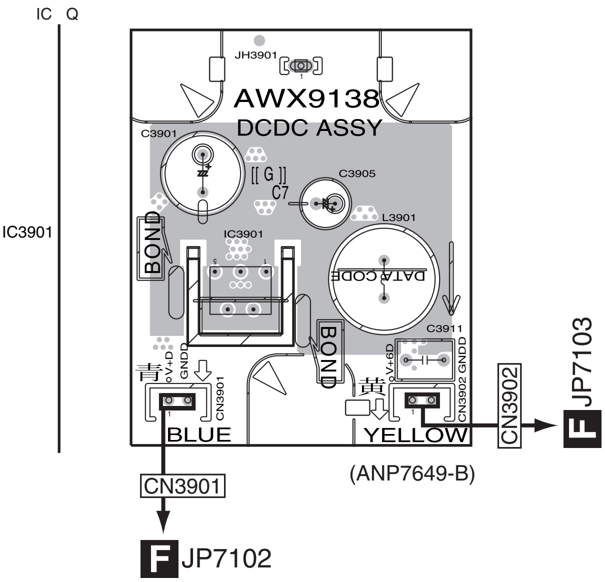
Y X

11.18 DCDC and HDMI RECT ASSYS

SIDE A

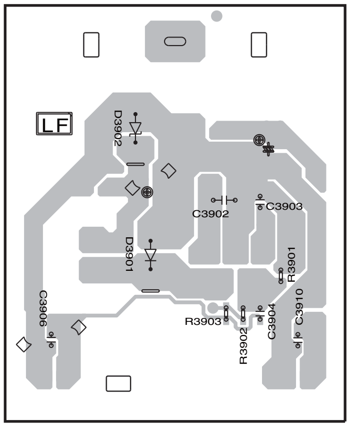
SIDE B

Z DCDC ASSY


IC Q
IC3901
JH3901
AWX9138
DCDC ASSY
C3901
[[G]]
C7
C3905
L3901
IC3901
BOND
DATA CODE
BOND
C3911
青
V+D
GNDD
CN3901
BLUE
黄
V+6D
GNDD
CN3902
YELLOW
CN3902
F JP7103
CN3901
F JP7102

(ANP7649-B)

Z DCDC ASSY

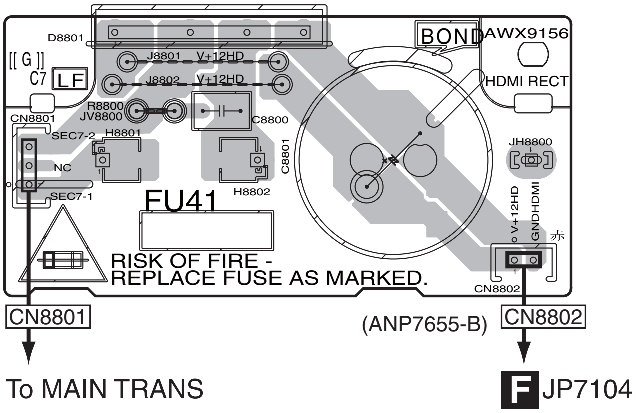

LF
D3902
C3902
C3903
D3901
R3901
C3906
R3903
R3902
C3904
C3910

(ANP7649-B)

SIDE A

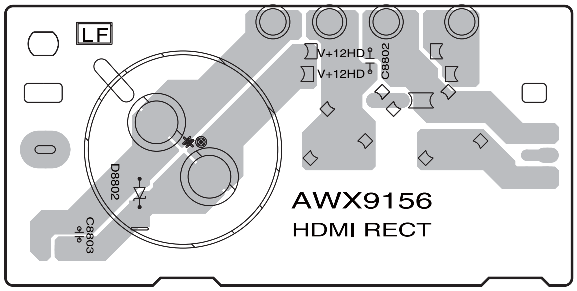
SIDE B

AA HDMI RECT ASSY


D8801
BOND
AWX9156
HDMI RECT
[[G]]
C7
LF
J8801 V+12HD
J8802 V+12HD
R8800
JV8800
C8800
CN8801
SEC7-2
H8801
NC
SEC7-1
C8801
H8802
JH8800
FU41
V+12HD
GNDHDMI
赤
RISK OF FIRE -
REPLACE FUSE AS MARKED.
CN8802
CN8801
CN8802
To MAIN TRANS
F JP7104

(ANP7655-B)

AA HDMI RECT ASSY


LF
V+12HD
V+12HD
C8802
D8802
C8803
AWX9156
HDMI RECT

(ANP7655-B)

Z AA

AA Z

12. ELECTRICAL PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47 k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω → 56×10^1 → 561 .... RD1/4PU$\boxed{5}\,\boxed{6}\,\boxed{1}$J
47 kΩ → 47×10^3 → 473 .... RD1/4PU$\boxed{4}\,\boxed{7}\,\boxed{3}$J
0.5 Ω → R50 .... RN2H$\boxed{R}\,\boxed{5}\,\boxed{0}$K
1 Ω → 1R0 .... RS1P$\boxed{1}\,\boxed{R}\,\boxed{0}$K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 kΩ → 562×10^1 → 5621 .... RN1/4PC$\boxed{5}\,\boxed{6}\,\boxed{2}\,\boxed{1}$F

LIST OF ASSEMBLIES

Mark	No. Description	Part No.
	1..ICEPOWER AMP ASSY	AWH7017
NSP	1..COMPOSITE ICE ASSY	AWM8106
	2..COMPOSITE S ASSY	AWX9144
	2..ICE BUFFER ASSY	AWX9145
	2..PRE BRIDGE ASSY	AWX9146
	2..ICE SHIELD ASSY	AWX9173
NSP	1..PRIM DISPLAY ASSY	AWM8120
	2..PRIMARY ASSY	AWX9166
	2..HDMI RECT ASSY	AWX9156
	2..DISPLAY ASSY (SC-LX81)	AWX9158
	2..DISPLAY ASSY (SC-LX71)	AWX9238
	2..VOL ASSY	AWX9159
	2..POWER SW ASSY	AWX9160
	2..V-BRIDGE ASSY	AWX9161
NSP	1..DIGITAL MOTHER ASSY	AWP7058
	2..D-MOTHER ASSY (SC-LX81)	AWX9196
	2..D-MOTHER ASSY (SC-LX71)	AWX9202
	2..ICE INTERFACE ASSY	AWX9137
	2..DCDC ASSY	AWX9138
	2..H GUARD2 ASSY	AWX9147
	2..H GUARD ASSY	AWX9174
NSP	1..COMPONENT FIN ASSY	AWQ7058
	2..COMPONENT ASSY (SC-LX81)	AWX9141
	2..COMPONENT ASSY (SC-LX71)	AWX9211
	2..FRONT IN ASSY	AWX9142
	2..ZOUT ASSY	AWX9143
NSP	1..INTERFACE REG ASSY	AWR7067
	2..INTERFACE ASSY	AWX9148
	2..ICE REG ASSY	AWX9149
	2..B REG ASSY	AWX9150
	2..B DIODE ASSY	AWX9171
NSP	1..FBRIDGE REG ASSY	AWR7068
	2..REG ASSY	AWX9152
	2..FRONT BRIDGE ASSY	AWX9155
NSP	1..AUDIO ASSY	AWR7071
	2..AUDIO ASSY	AWX9206
	2..232C CONTROL ASSY	AWX9209
	2..PRIMARY GUARD ASSY	AWX9172
	1..HDMI NETWORK ASSY (SC-LX81)	AWX9234
	1..HDMI NETWORK ASSY (SC-LX71)	AWX9235
	1..FM/AM TUNER UNIT	AXX7248

CONTRAST OF PCB ASSEMBLIES

G COMPONENT ASSY

AWX9141 and AWX9211 are constructed the same except for the following:

Mark	Symbol and Description	AWX9141	AWX9211
	IC6002, IC6004 Multiplexer(4chx2)	TC74LVX4052FT	Not used
	IC6008 Video IC	NJM2581M	Not used
	JA6003 Pin Jack(6p)	AKB7204	Not used
	JA6005 Pin Jack(3p)	Not used	AKB7203
	R6043-R6045	RS1/16S750J	Not used
	R6108	RS1/16S103J	Not used
	C6050, C6051, C6055-C6057	CEAT101M10	Not used
	C6058, C6059, C6148, C6151, C6158, C6161	CKSRYB105K10	Not used
	C6060, C6061, C6149, C6150, C6159, C6160	CCSRCH102J50	Not used
	C6131-C6136	CKSRYB103K50	Not used

K DISPLAY ASSY

AWX9158 and AWX9238 are constructed the same except for the following:

Mark	Symbol and Description	AWX9158	AWX9238
	R8015, R8084	Not used	RS1/16S0R0J

A AUDIO ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 5001,5282,5302,5401		NJM4565MD
	IC 5201		BD3473KS2
	IC 5221		BD3814FV
	IC 5255,5351		TC4053BFN
	IC 5301		TC4066BFN
	IC 5651		LC72725KM
	Q 5269,5301,5351		RT1N241M
	Q 5302		RT1P241M
	Q 5401,5402		2SK208
	Q 5431		IMX25
	Q 5451		RT3T22M
	Q 5453		RT1N140M
⚠	Q 5501		2SD1858X
⚠	Q 5502		2SB1237X
⚠	Q 5601		2SD1664
	D 5201,5301,5302		1SS302
	D 5401,5402,5451,5452		1SS352
	D 5501,5502		UDZS7R5(B)
	D 5602		UDZS10(B)
	D 5651		1SS352

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 5651	CHIP SOLID INDUCTOR	QTL1013
	JA 5001,5002	PIN JACK(4P)	XKB3017
	JA 5004-5009	PIN JACK(4P)	XKB3017
	RY 5451	RELAY	VSR1017
	X 5651	CRYSTAL RESONATOR (4.332 MHz)	ASS7004
	CN 5002	CONNECTOR	CKS3384
	CN 5003	CONNECTOR	CKS3386
	CN 5004	13P CONNECTOR	52044-1345
	CN 5005	17P CONNECTOR	52044-1745
	CN 5006	21P SOCKET	XKP3081
	CN 5007	9P CONNECTOR	52044-0945
	CN 5008	11P CONNECTOR	52044-1145
	CN 5009	CONNECTOR	CKS3376
	JH 5001	PCB BINDER	VEF1040
	JP 5001	5P HOUSING ASSY	ADX7653

RESISTORS

Mark	No.	Description	Part No.
	R 5413,5414		RD1/4MUF330J
	Other Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
	C 5001,5002,5403,5404		CCSRCH221J50
	C 5003,5004,5017,5018		CEAT100M50
	C 5005,5006,5201,5203		CCSRCH331J50
	C 5007,5008,5019,5020		CEAT470M16
	C 5009,5010,5653		CCSRCH561J50
	C 5011,5012		CKSRYB822K50
	C 5013-5016		CKSRYB122K50
	C 5021,5022,5232,5234		CKSRYB104K16
	C 5031-5034,5041,5042		CCSRCH101J50
	C 5035,5038,5055,5056		CEAT220M50
	C 5043,5044,5113,5114		CCSRCH220J50
	C 5045,5046,5115,5116		CEAT100M50
	C 5051-5054,5071-5074		CCSRCH101J50
	C 5075,5076,5085,5086		CEAT220M50
	C 5081-5084,5091-5094		CCSRCH101J50
	C 5095,5096,5105,5106		CEAT220M50
	C 5101-5104,5111,5112		CCSRCH101J50
	C 5121-5124,5131,5132		CCSRCH101J50
	C 5125,5126,5145,5146		CEAT220M50
	C 5133,5134		CCSRCH220J50
	C 5135,5136,5221,5222		CEAT100M50
	C 5141-5144,5151-5154		CCSRCH101J50
	C 5155,5156,5165,5166		CEAT220M50
	C 5161-5164,5171-5174		CCSRCH101J50
	C 5175,5176,5185,5186		CEAT220M50
	C 5181-5184,5205,5206		CCSRCH101J50
	C 5202,5204		ACH1479
	C 5207,5208		CEAT220M50
	C 5209,5210		CFHXSQ103J16
	C 5223,5224,5227,5228		CEAT2R2M50
	C 5225,5226,5271-5278		CEAT100M50
	C 5231,5233,5411,5412		CEAT470M16
	C 5235,5236,5282,5303		CCSRCH101J50
	C 5265,5266,5285,5286		CKSRYB103K50
	C 5290,5503,5504,5656		CEAT100M50
	C 5301,5302,5305,5306		CKSRYB103K50
	C 5304		CCSRCH101J50
	C 5307,5308		ACH7196
	C 5351,5352,5421,5423		CKSRYB103K50
	C 5356,5357,5508,5510		CCSRCH102J50
	C 5401,5402		CEAT1R0M50
	C 5409,5410		CEAT471M16
	C 5419,5420		CKSRYB105K16
	C 5422,5424		CEAT470M25
	C 5431,5432,5601,5605		CKSRYB103K50
	C 5451,5603,5606		CEAT101M16
	C 5501,5502		CEAT2R2M50
	C 5511,5611,5652		CCSRCH102J50
	C 5602,5708,5710,5712		CKSRYB104K16
	C 5607,5621,5622		CCSRCH100D50
	C 5613		CCSRCH331J50
	C 5651		CEAT101M10
	C 5654,5705		CKSRYB103K50
	C 5655,5657		CCSRCH270J50
	C 5658		CKSRYB472K50
	C 5701,5703,5709,5711		CKSRYB471K50
	C 5702,5704		CKSRYB104K50
	C 5713,5715,5719		CKSRYB471K50
	C 5714,5718		CKSRYB104K16

B D-MOTHER ASSY (SC-LX81)

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 2001		PEG489B8
	IC 2002,2003,2203,2204		TC4094BFN
	IC 2005		BU4842F
	IC 2006		TC74LCX244FTS1
	IC 2007,2008,2406		TC74VHCT125AFTS1
	IC 2009		TC74VHCT541AFTS1
⚠	IC 2011,2412		NJM2880U1-33
	IC 2201		PEG396A
	IC 2202		AYW7256
	IC 2205,2211,2408,2409		TC74VHC125FTS1
	IC 2206		TC74VHC32FTS1
	IC 2207,2407,2709,2805		TC74VHC08FTS1
	IC 2208		TC74VHCT08AFTS1
	IC 2209		TC74VHC04FTS1
	IC 2210		TC74VHC00FTS1
	IC 2213		TC7SH04FUS1
	IC 2401		AK4114VQ
	IC 2403,2404,2803		TC74LCX157FTS1
	IC 2410,2411,2707		TC7SH08FUS1
⚠	IC 2413,2983		NJM2845DL1-05
	IC 2414		TC74VHC125FTS1
	IC 2701		DSPA56720AG
	IC 2702		AYW7234
	IC 2703		HY57V641620FTP-6
	IC 2704,2705		TC74LCX573FTS1
⚠	IC 2706		NJM2872BF33
⚠	IC 2710		NJM2846DL3-33
⚠	IC 2711		PQ1LAX95MSPQ
⚠	IC 2712		RP131H101D
⚠	IC 2713		NJM2846DL3-25
	IC 2714		TC7SH32FUS1
	IC 2801		DSPC56371AF180
	IC 2802		PDC168A8
	IC 2804,2806		TC74LCX08FTS1
	IC 2807		TC74VHC126FTS1
	IC 2808		TC7WH157FU
	IC 2901,2902,3401		NJM4565MD
	IC 2951		PCM1804DB
⚠	IC 2981		NJM2391DL1-33
⚠	IC 2982		NJM2885DL1-33
	IC 3001,3101,3201,3301		RNB4580F
	IC 3051,3151,3251,3351		SRC4190IDB
	IC 3052,3152,3252,3352		WM8740SEDS
	IC 3053,3153,3253,3353		TC7WH125FU
	IC 3451		AK4387ET
	Q 2005,2008		RT1N241M
	Q 2006		RT3P22M
	Q 2007		2SA1366
	Q 2201		RT1N141M-11
	Q 2202		2SA1602A
	Q 2203		RT1P431M
	Q 2205,2207,2208		RT1P241M
	D 2001,2003,2951,2952		MC2848-11
	D 2002		RB520S-30
⚠	D 2004,2005		MC2848-11
	D 2201		1SS357
	D 2701-2704		1SR154-400
	D 2953,2954		MC2846-11

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 2001	CHIP SOLID INDUCTOR	QTL1013
	L 2002,2003	CHIP SOLID INDUCTOR	ATL7002
	L 2404-2406	CHIP SOLID INDUCTOR	QTL1013
	L 2408,2409	CHIP SOLID INDUCTOR	QTL1013
	L 2411-2416	CHIP SOLID INDUCTOR	QTL1013
	L 2701	CHIP SOLID INDUCTOR	QTL1013
	L 2703-2711	CHIP SOLID INDUCTOR	QTL1013
	L 2713	CHIP SOLID INDUCTOR	QTL1013
	L 2801-2804	CHIP SOLID INDUCTOR	QTL1013
	L 2806-2811	CHIP SOLID INDUCTOR	QTL1013
	L 2951,2952	CHIP SOLID INDUCTOR	QTL1013
	L 3051-3054	CHIP SOLID INDUCTOR	QTL1013
	L 3081	CHIP SOLID INDUCTOR	QTL1013
	L 3151-3154	CHIP SOLID INDUCTOR	QTL1013
	L 3181	CHIP SOLID INDUCTOR	QTL1013
	L 3251-3254	CHIP SOLID INDUCTOR	QTL1013
	L 3281	CHIP SOLID INDUCTOR	QTL1013
	L 3351-3354	CHIP SOLID INDUCTOR	QTL1013
	L 3381,3451	CHIP SOLID INDUCTOR	QTL1013
	JA 2401	PIN JACK(3P)	AKB7205
	JA 2402-2405	OPT. LINK IN	AKS7001
	JA 2406,2407	OPT. LINK OUT	AKS7002
	KN 2001,2201	WRAPPING TERMINAL	VNF1084
	KN 2401	SCREW PLATE	VNE1948
	X 2001	RESONATOR (24.000 MHz)	CSS1716
	X 2201	CERAMIC RESONATOR (15.7MHz)	ASS7087
	X 2701	CRYSTAL OSCILLATOR (24.576 MHz)	ASS7072
	X 2702	CRYSTAL OSCILLATOR (22.5792 MHz)	ASS7071
	CN 2001	16P CONNECTOR	VKN1420
	CN 2002	29P CONNECTOR	VKN1844
	CN 2003	22P CONNECTOR	RKN1063
	CN 2005,2007,2902	PLUG	CKS1764
	CN 2006	7P SOCKET	XKP3074
	CN 2008,2903	PLUG	CKS1761
	CN 2401	PLUG(3P)	KM200NA3
	CN 2402	23P SOCKET	XKP3082
	CN 2403	CONNECTOR	CKS3815
	CN 2901	PLUG	CKS1758
	JH 2001	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
	R 2001-2003,2005-2007		RS1/16S104J
	R 2010-2012,2035,2202		RS1/16S473J
	R 2015,2027,2032,2039		RS1/16S104J
	R 2018,2209		RS1/16S512J
	R 2021,2026,2028,2030		RAB4CQ101J
	R 2033,2034		RAB4CQ471J
	R 2036,2049,2207,2214		RAB4CQ101J
	R 2041,2043,2045,2046		RS1/16S104J
	R 2047,3117,3118,3217		RS1/16S474J
	R 2050,2066,2067,2069		RS1/16S104J
	R 2072,2103,2105,2107		RAB4CQ473J
	R 2073		RS1/16S472J
	R 2140,2141,2270,2271		RS1/16S0R0J
	R 2203,2717-2719,2721		RAB4CQ220J
	R 2210,2237,2466,2467		RS1/16S101J
	R 2211,2217,2229,2230		RS1/16S473J
	R 2216,2218,2223,2226		RAB4CQ101J

Mark	No.	Description	Part No.
R	2233,2235,2246		RS1/16S473J
R	2234,2425,2730,2812		RAB4CQ101J
R	2241		RAB4CQ473J
R	2255		RS1/16S104J
R	2401-2403		RS1/16S750J
R	2404-2406,2901-2904		RS1/16S220J
R	2423		RS1/16SS1802F
R	2604,3017,3018,3051		RS1/16S0R0J
R	2714,2905,2906,2909		RS1/16S103J
R	2715,2746,2802		RAB4CQ470J
R	2722,2761,2762,2765		RAB4CQ220J
R	2747,2803		RAB4CQ103J
R	2759,2760,2763,2764		RAB4CQ221J
R	2766		RAB4CQ220J
R	2789		RS1/16SS1000F
R	2790		RS1/16SS1202F
R	2791		RS1/10S0R0J
R	2795,2796		RS1/16S101J
R	2822,3455		RAB4CQ101J
R	2907,2908,2911,2912		RS1/16S682J
R	2910		RS1/16S103J
R	2913-2918,3108,3116		RS1/16S392J
R	2919,2920		RS1/16S822J
R	2921,2922		RS1/16S911J
R	3001,3002,3009,3010		RS1/16S181J
R	3003-3006,3011-3014		RS1/16S222J
R	3007,3008,3015,3016		RS1/16S202J
R	3021,3022,3119,3120		RS1/16S221J
R	3101,3109,3201,3202		RS1/16S681J
R	3102,3110		RS1/16S181J
R	3103-3106,3203-3206		RS1/16S222J
R	3107,3112,3114,3115		RS1/16S122J
R	3111,3113,3211-3214		RS1/16S272J
R	3151,3251,3351,3456		RS1/16S0R0J
R	3207,3208,3215,3216		RS1/16S122J
R	3209,3210,3301,3302		RS1/16S681J
R	3218,3317,3318,3413		RS1/16S474J
R	3219,3220,3319,3320		RS1/16S221J
R	3303-3306		RS1/16S222J
R	3307,3308,3315,3316		RS1/16S122J
R	3309,3310		RS1/16S681J
R	3311-3314		RS1/16S272J
R	3401,3402		RS1/16S223J
R	3403,3404		RS1/16S302J
R	3405,3406,3409,3410		RS1/16S332J
R	3407,3408		RS1/16S392J
R	3411,3412		RS1/16S221J
R	3414		RS1/16S474J
R	3458		RS1/16S4R7J
Other Resistors			RS1/16SS###J

CAPACITORS

Mark	No.	Description	Part No.
C	2001,2040,3060,3068		CKSRYB105K16
C	2002,2004,2006,2011		CKSRYB104K16
C	2003,2014,2015,2039		CKSRYB471K50
C	2005,2007,2030,2032		CKSRYB102K50
C	2008,2738,2817		CKSSYB103K16
C	2009		ACH7298
C	2012		CKSRYB472K50
C	2013,2220,2221,2954		CKSRYB103K50
C	2016,2047,3001,3002		CCSRCH102J50
C	2017,2018,2020-2022		CKSRYB104K16
C	2019,2026,2211-2215		CKSSYB104K10
C	2024,2029,2031,2038		CKSRYB104K16
C	2025		CEAT331M10
C	2027,2454,2457,2762		CKSQYB225K10
C	2028		CKSRYB473K50
C	2037,2929,2952,2984		CEHAZL101M25
C	2041,2046,2209,2210		CKSRYB104K16
C	2050-2054,2056-2065		CCSSCH100D50
C	2201,2426,2827		ACH7272
C	2202,2204,2205,2208		CCSSCH471J16
C	2206,2965,3052,3071		CCSRCH471J50
C	2216		CEAT102M10
C	2217,2227,2402,2404		CKSRYB104K16
C	2222,2224-2226,2228		CKSSYB104K10
C	2230,2414,2421,2425		CKSSYB104K10
C	2406-2413,2417,2450		CKSRYB104K16
C	2415,2431,2433,2437		CKSSYB471K50
C	2416,2419,2422,2458		CEHAZL101M10
C	2418,2420,2424,2747		CCSSCH471J16
C	2423		CKSRYB474K10
C	2430,2432,2436,2438		CKSSYB104K10
C	2439,2447,2449,2462		CKSSYB471K50
C	2440,2448,2452,2461		CKSSYB104K10
C	2451,2785		ACH7273
C	2453,2456,2780,2901		CKSRYB104K16
C	2455,2732,2781,2783		CEHAZL221M10
C	2463,2701,2703,2704		CKSSYB471K50
C	2464,2702,2705,2708		CKSSYB104K10
C	2706,2707,2709,2711		CKSSYB471K50
C	2710,2712,2714,2718		CKSSYB104K10
C	2713,2715-2717,2719		CKSSYB471K50
C	2720,2723,2725,2728		CKSSYB104K10
C	2721,2722,2724,2726		CKSSYB471K50
C	2727,2729,2736,2743		CKSSYB471K50
C	2730,2734		CKSQYB474K25
C	2731		CKSQYB225K16
C	2733		ACH7203
C	2735,2779,2851,2852		CKSQYB475K10
C	2737,2744,2746,2756		CKSSYB104K10
C	2745,2769,2772,2801		CKSSYB471K50
C	2748,2750,2751,2753		CKSSYB105K6R3
C	2749,2752,2754		CCSSCH102J50
C	2755,2791,2796		CKSSYB105K6R3
C	2757,2759,2764,2766		CCSSCH471J16
C	2758,2760,2761,2763		CKSSYB104K10
C	2765,2770,2771		CKSSYB104K10
C	2773-2776,2786-2790		CKSSYB104K10
C	2777,2778,2991,2993		CKSQYB225K10
C	2782,2956,2957,3061		ACH7211
C	2784,3065,3165,3265		CEHAZL221M10
C	2792-2795		CCSSCH102J50
C	2797,2798,2800,2802		CKSSYB104K10
C	2799		VCH1234
C	2803,2805,2807,2809		CKSSYB471K50
C	2804,2806,2808,2810		CKSSYB104K10
C	2811,2813,2815,2818		CKSSYB471K50
C	2812,2814,2816,2819		CKSSYB104K10

Mark	No.	Description	Part No.
C	2820,2822,2824,2831		CKSSYB471K50
C	2821,2823,2825,2829		CKSSYB104K10
C	2826,3055,3063,3155		ACH7268
C	2830,2832,2834,2836		CKSSYB104K10
C	2833,2835,2837,2838		CKSSYB471K50
C	2839,2840,3081,3181		CKSSYB104K10
C	2841,3082,3182,3282		CKSSYB471K50
C	2902,2928,2953,2955		CKSRYB104K16
C	2903,2904		DCH1201
C	2905-2908,3109,3110		ACH7196
C	2911,2912,2915,2916		CFHXSQ103J16
C	2913,2914		CCSRCH101J50
C	2958,2961-2963,2966		CKSRYB104K16
C	2959,2964,3059,3070		CKSRYB103K50
C	2960,2981,2990,2995		CEHAZL101M10
C	2983,2992,2994,3053		CKSRYB104K16
C	2987		CEHAZL101M25
C	2996,2997,3007,3008		CFHXSQ103J16
C	3003-3006,3103,3105		CCSRCH331J50
C	3013,3014,3113,3114		CFHXSQ472J16
C	3051,3151,3251,3351		CEHAZL101M10
C	3056,3058,3062,3064		CKSRYB104K16
C	3057,3075,3101,3102		CCSRCH102J50
C	3066,3072,3153,3156		CKSRYB104K16
C	3067,3161,3167,3261		ACH7211
C	3104,3106		CCSRCH271J50
C	3107,3108,3207,3208		CFHXSQ103J16
C	3152,3171,3252,3271		CCSRCH471J50
C	3157,3175,3201,3202		CCSRCH102J50
C	3158,3162,3164,3166		CKSRYB104K16
C	3159,3170,3259,3270		CKSRYB103K50
C	3160,3168,3260,3268		CKSRYB105K16
C	3163,3255,3263,3355		ACH7268
C	3172,3253,3256,3258		CKSRYB104K16
C	3203-3206,3303-3306		CCSRCH331J50
C	3209,3210,3309,3310		ACH7196
C	3213,3214,3313,3314		CFHXSQ472J16
C	3257,3275,3301,3302		CCSRCH102J50
C	3262,3264,3266,3272		CKSRYB104K16
C	3267,3361,3367		ACH7211
C	3281,3381,3461		CKSSYB104K10
C	3307,3308		CFHXSQ103J16
C	3352,3371,3405,3406		CCSRCH471J50
C	3353,3356,3358,3362		CKSRYB104K16
C	3357,3375		CCSRCH102J50
C	3359,3370,3456,3458		CKSRYB103K50
C	3360,3368		CKSRYB105K16
C	3363		ACH7268
C	3364,3366,3372,3452		CKSRYB104K16
C	3365		CEHAZL221M10
C	3382		CKSSYB471K50
C	3401,3402		CEAT220M50
C	3403,3404		CCSRCH391J50
C	3407,3408		CKSRYB104K25
C	3409,3410		CEAT100M50
C	3453,3454		CEAT470M16
C	3455,3457,3460		CKSRYB104K16
C	3459		CCSRCH471J50

B D-MOTHER ASSY (SC-LX71)

SEMICONDUCTORS

Mark	No.	Description	Part No.
IC	2001		PEG489B8
IC	2002,2003,2203,2204		TC4094BFN
IC	2005		BU4842F
IC	2006		TC74LCX244FTS1
IC	2007,2008,2406		TC74VHCT125AFTS1
IC	2009		TC74VHCT541AFTS1
⚠ IC	2011,2412		NJM2880U1-33
IC	2201		PEG396A
IC	2202		AYW7256
IC	2205,2211,2408,2409		TC74VHC125FTS1
IC	2206		TC74VHC32FTS1
IC	2207,2407,2709,2805		TC74VHC08FTS1
IC	2208		TC74VHCT08AFTS1
IC	2209		TC74VHC04FTS1
IC	2210		TC74VHC00FTS1
IC	2213		TC7SH04FUS1
IC	2401		AK4114VQ
IC	2403,2404,2803		TC74LCX157FTS1
IC	2410,2411,2707		TC7SH08FUS1
⚠ IC	2413,2983		NJM2845DL1-05
IC	2414		TC74VHC125FTS1
IC	2701		DSPA56720AG
IC	2702		AYW7234
IC	2703		HY57V641620FTP-6
IC	2704,2705		TC74LCX573FTS1
⚠ IC	2706		NJM2872BF33
⚠ IC	2710		NJM2846DL3-33
⚠ IC	2711		PQ1LAX95MSPQ
⚠ IC	2712		RP131H101D
⚠ IC	2713		NJM2846DL3-25
IC	2714		TC7SH32FUS1
IC	2801		DSPC56371AF180
IC	2802		PDC168A8
IC	2804,2806		TC74LCX08FTS1
IC	2807		TC74VHC126FTS1
IC	2901,2902,3401		NJM4565MD
IC	2951		PCM1804DB
⚠ IC	2981		NJM2391DL1-33
IC	3001,3101,3201,3301		RNB4580F
IC	3052,3152,3252,3352		WM8740SEDS
IC	3451		AK4387ET
Q	2005,2008		RT1N241M
Q	2006		RT3P22M
Q	2007		2SA1366
Q	2201		RT1N141M-11
Q	2202		2SA1602A
Q	2203		RT1P431M
Q	2205,2207,2208		RT1P241M
D	2001,2003,2951,2952		MC2848-11
D	2002		RB520S-30
⚠ D	2004,2005		MC2848-11
D	2201		1SS357
D	2701-2704		1SR154-400
D	2953,2954		MC2846-11

MISCELLANEOUS

Mark	No.	Description	Part No.
L	2001	CHIP SOLID INDUCTOR	QTL1013
L	2002,2003	CHIP SOLID INDUCTOR	ATL7002

Mark	No.	Description	Part No.
L	2404-2406	CHIP SOLID INDUCTOR	QTL1013
L	2408,2409	CHIP SOLID INDUCTOR	QTL1013
L	2411-2416	CHIP SOLID INDUCTOR	QTL1013
L	2701	CHIP SOLID INDUCTOR	QTL1013
L	2703-2711	CHIP SOLID INDUCTOR	QTL1013
L	2713	CHIP SOLID INDUCTOR	QTL1013
L	2801-2804	CHIP SOLID INDUCTOR	QTL1013
L	2806-2810	CHIP SOLID INDUCTOR	QTL1013
L	2951,2952	CHIP SOLID INDUCTOR	QTL1013
L	3053,3054	CHIP SOLID INDUCTOR	QTL1013
L	3153,3154	CHIP SOLID INDUCTOR	QTL1013
L	3253,3254	CHIP SOLID INDUCTOR	QTL1013
L	3353,3354	CHIP SOLID INDUCTOR	QTL1013
L	3451	CHIP SOLID INDUCTOR	QTL1013
JA	2402-2405	OPT. LINK IN	AKS7001
JA	2406,2407	OPT. LINK OUT	AKS7002
JA	2408	PIN JACK(2P)	AKB7173
KN	2001,2201	WRAPPING TERMINAL	VNF1084
KN	2401	SCREW PLATE	VNE1948
X	2001	RESONATOR (24.000 MHz)	CSS1716
X	2201	CERAMIC RESONATOR (15.7MHz)	ASS7087
X	2701	CRYSTAL OSCILLATOR (24.576 MHz)	ASS7072
X	2702	CRYSTAL OSCILLATOR (22.5792 MHz)	ASS7071
CN	2001	16P CONNECTOR	VKN1420
CN	2002	29P CONNECTOR	VKN1844
CN	2003	22P CONNECTOR	RKN1063
CN	2005,2007,2902	PLUG	CKS1764
CN	2006	7P SOCKET	XKP3074
CN	2008,2903	PLUG	CKS1761
CN	2401	PLUG(3P)	KM200NA3
CN	2402	23P SOCKET	XKP3082
CN	2403	CONNECTOR	CKS3815
CN	2901	PLUG	CKS1758
JH	2001	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
R	2001-2003,2005-2007		RS1/16S104J
R	2010,2013,2035,2201		RS1/16S473J
R	2015,2027,2032,2039		RS1/16S104J
R	2018,2209		RS1/16S512J
R	2021,2026,2028,2030		RAB4CQ101J
R	2033,2034		RAB4CQ471J
R	2036,2049,2207,2214		RAB4CQ101J
R	2041,2043,2045,2046		RS1/16S104J
R	2047,3117,3118,3217		RS1/16S474J
R	2050,2066,2067,2069		RS1/16S104J
R	2072,2103,2105,2107		RAB4CQ473J
R	2073		RS1/16S472J
R	2140,2141,2270,2271		RS1/16S0R0J
R	2203,2717-2719,2721		RAB4CQ220J
R	2210,2237,2466,2467		RS1/16S101J
R	2211,2217,2229,2230		RS1/16S473J
R	2216,2218,2223,2226		RAB4CQ101J
R	2233,2235		RS1/16S473J
R	2234,2425,2730,2812		RAB4CQ101J
R	2241		RAB4CQ473J
R	2255		RS1/16S104J
R	2401,2402		RS1/16S750J
R	2404,2405,2901-2904		RS1/16S220J
R	2423		RS1/16SS1802F
R	2604,3017,3018,3065		RS1/16S0R0J
R	2714,2905,2906,2909		RS1/16S103J
R	2715,2746,2802		RAB4CQ470J
R	2722,2761,2762,2765		RAB4CQ220J
R	2747,2803		RAB4CQ103J
R	2759,2760,2763,2764		RAB4CQ221J
R	2766		RAB4CQ220J
R	2789		RS1/16SS1000F
R	2790		RS1/16SS1202F
R	2791		RS1/10S0R0J
R	2795,2796		RS1/16S101J
R	2822,3455		RAB4CQ101J
R	2907,2908,2911,2912		RS1/16S682J
R	2910		RS1/16S103J
R	2913-2918,3108,3116		RS1/16S392J
R	2919,2920		RS1/16S822J
R	2921,2922		RS1/16S911J
R	3001,3002,3009,3010		RS1/16S181J
R	3003-3006,3011-3014		RS1/16S222J
R	3007,3008,3015,3016		RS1/16S202J
R	3021,3022,3119,3120		RS1/16S221J
R	3066,3080,3165,3166		RS1/16S0R0J
R	3101,3109,3201,3202		RS1/16S681J
R	3102,3110		RS1/16S181J
R	3103-3106,3203-3206		RS1/16S222J
R	3107,3112,3114,3115		RS1/16S122J
R	3111,3113,3211-3214		RS1/16S272J
R	3180,3265,3266,3280		RS1/16S0R0J
R	3207,3208,3215,3216		RS1/16S122J
R	3209,3210,3301,3302		RS1/16S681J
R	3218,3317,3318,3413		RS1/16S474J
R	3219,3220,3319,3320		RS1/16S221J
R	3303-3306		RS1/16S222J
R	3307,3308,3315,3316		RS1/16S122J
R	3309,3310		RS1/16S681J
R	3311-3314		RS1/16S272J
R	3365,3366,3380,3456		RS1/16S0R0J
R	3401,3402		RS1/16S223J
R	3403,3404		RS1/16S302J
R	3405,3406,3409,3410		RS1/16S332J
R	3407,3408		RS1/16S392J
R	3411,3412		RS1/16S221J
R	3414		RS1/16S474J
R	3458		RS1/16S4R7J
	Other Resistors		RS1/16SS###J

CAPACITORS

Mark	No.	Description	Part No.
C	2001,2040,3060,3068		CKSRYB105K16
C	2002,2004,2006,2011		CKSRYB104K16
C	2003,2014,2015,2039		CKSRYB471K50
C	2005,2007,2030,2032		CKSRYB102K50
C	2008,2738,2817		CKSSYB103K16
C	2009		ACH7298
C	2012,3011,3012,3111		CKSRYB472K50
C	2013,2220,2221,2954		CKSRYB103K50
C	2016,2047,3001,3002		CCSRCH102J50
C	2017,2018,2020-2022		CKSRYB104K16
C	2019,2026,2211-2215		CKSSYB104K10
C	2024,2029,2031,2038		CKSRYB104K16
C	2025		CEAT331M10

Mark	No.	Description	Part No.
C	2027,2454,2457,2762		CKSQYB225K10
C	2028		CKSRYB473K50
C	2037,2929,2952,2984		CEHAZL101M25
C	2041,2046,2209,2210		CKSRYB104K16
C	2050-2054,2056-2065		CCSSCH100D50
C	2201,2426,2827		ACH7272
C	2202,2204,2205,2208		CCSSCH471J16
C	2206,2965,3071,3171		CCSRCH471J50
C	2216		CEAT102M10
C	2217,2227,2402,2404		CKSRYB104K16
C	2222,2224-2226,2228		CKSSYB104K10
C	2230,2414,2421,2425		CKSSYB104K10
C	2407-2413,2417,2450		CKSRYB104K16
C	2415,2431,2433,2437		CKSSYB471K50
C	2416,2419,2422,2458		CEHAZL101M10
C	2418,2420,2424,2747		CCSSCH471J16
C	2423		CKSRYB474K10
C	2430,2432,2434,2436		CKSSYB104K10
C	2438,2440,2448,2452		CKSSYB104K10
C	2439,2447,2449,2462		CKSSYB471K50
C	2451,2785		ACH7273
C	2453,2456,2780,2901		CKSRYB104K16
C	2455,2732,2781,2783		CEHAZL221M10
C	2461,2464,2702,2705		CKSSYB104K10
C	2463,2701,2703,2704		CKSSYB471K50
C	2706,2707,2709,2711		CKSSYB471K50
C	2708,2710,2712,2714		CKSSYB104K10
C	2713,2715-2717,2719		CKSSYB471K50
C	2718,2720,2723,2725		CKSSYB104K10
C	2721,2722,2724,2726		CKSSYB471K50
C	2727,2729,2736,2743		CKSSYB471K50
C	2728,2737,2744,2746		CKSSYB104K10
C	2730,2734		CKSQYB474K25
C	2731		CKSQYB225K16
C	2733		ACH7203
C	2735,2779,2851,2852		CKSQYB475K10
C	2745,2769,2772,2801		CKSSYB471K50
C	2748,2750,2751,2753		CKSSYB105K6R3
C	2749,2752,2754		CCSSCH102J50
C	2755,2791,2796		CKSSYB105K6R3
C	2756,2758,2760,2761		CKSSYB104K10
C	2757,2759,2764,2766		CCSSCH471J16
C	2763,2765,2770,2771		CKSSYB104K10
C	2773-2776,2786-2790		CKSSYB104K10
C	2777,2778,2993		CKSQYB225K10
C	2782,2956,2957,3061		ACH7211
C	2784,3065,3165,3265		CEHAZL221M10
C	2792-2795		CCSSCH102J50
C	2797,2798,2800,2802		CKSSYB104K10
C	2799		VCH1234
C	2803,2805,2807,2809		CKSSYB471K50
C	2804,2806,2808,2810		CKSSYB104K10
C	2811,2813,2815,2818		CKSSYB471K50
C	2812,2814,2816,2819		CKSSYB104K10
C	2820,2822,2824,2831		CKSSYB471K50
C	2821,2823,2825,2829		CKSSYB104K10
C	2826,3063,3163,3263		ACH7268
C	2830,2832,2834,2836		CKSSYB104K10
C	2833,2835,2837,2838		CKSSYB471K50
C	2839,3461		CKSSYB104K10
C	2902,2928,2953,2955		CKSRYB104K16
C	2903,2904		DCH1201
C	2905-2908,3109,3110		ACH7196
C	2911,2912,2915,2916		CKSQYB103K50
C	2913,2914		CCSRCH101J50
C	2958,2961-2963,2966		CKSRYB104K16
C	2959,2964,3059,3070		CKSRYB103K50
C	2960,2981,2995		CEHAZL101M10
C	2983,2994,3058,3062		CKSRYB104K16
C	2985,2986,3407,3408		CKSRYB104K25
C	2987		CEHAZL101M25
C	3003-3006,3103,3105		CCSRCH331J50
C	3007,3008,3107,3108		CKSQYB103K50
C	3064,3066,3072,3158		CKSRYB104K16
C	3067,3161,3167,3261		ACH7211
C	3101,3102,3201,3202		CCSRCH102J50
C	3104,3106		CCSRCH271J50
C	3112,3211,3212,3311		CKSRYB472K50
C	3159,3170,3259,3270		CKSRYB103K50
C	3160,3168,3260,3268		CKSRYB105K16
C	3162,3164,3166,3172		CKSRYB104K16
C	3203-3206,3303-3306		CCSRCH331J50
C	3207,3208,3307,3308		CKSQYB103K50
C	3209,3210,3309,3310		ACH7196
C	3258,3262,3264,3266		CKSRYB104K16
C	3267,3361,3367		ACH7211
C	3271,3371,3405,3406		CCSRCH471J50
C	3272,3358,3362,3364		CKSRYB104K16
C	3301,3302		CCSRCH102J50
C	3312		CKSRYB472K50
C	3359,3370,3456,3458		CKSRYB103K50
C	3360,3368		CKSRYB105K16
C	3363		ACH7268
C	3365		CEHAZL221M10
C	3366,3372,3452,3455		CKSRYB104K16
C	3401,3402		CEAT220M50
C	3403,3404		CCSRCH391J50
C	3409,3410		CEAT100M50
C	3453,3454		CEAT470M16
C	3457,3460		CKSRYB104K16
C	3459		CCSRCH471J50

C FRONT IN ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
IC	6201		NJM4565MD
Q	6201		HN1C01FU
D	6201,6202,6204		1SS302
D	6203,6205,6206		UDZS5R1(B)
D	6303,6304		UMZU6.2N

MISCELLANEOUS

Mark	No.	Description	Part No.
L	6201	CHIP SOLID INDUCTOR	QTL1013
JA	6201	JACK	RKN1004
JA	6202	FRONT AV INPUT	AKX7019
JA	6301	USB CONNECTOR	XKP3086
JA	6351	PHONE JACK	AKN7029
KN	6201,6202	WRAPPING TERMINAL	VNF1084
KN	6351	WRAPPING TERMINAL	VNF1084
CN	6201	PLUG(3P)	KM200NA3

Mark	No.	Description	Part No.
	CN 6202	CONNECTOR	CKS3380
	CN 6301	PLUG(5P)	KM200NA5
	CN 6351	4P JUMPER CONNECTOR	52147-0410

RESISTORS

Mark	No.	Description	Part No.
		All Resistors	RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	JH 6302	PCB BINDER	VEF1040

CAPACITORS

Mark	No.	Description	Part No.
	C 6202,6208,6218,6224		CKSRYB104K16
	C 6204,6220,6226,6228		CKSRYB103K50
	C 6205,6206		CKSRYB221K50
	C 6209		CKSRYB105K6R3
	C 6210,6211,6234,6235		CEAT100M50
	C 6212		CKSRYB471K50
	C 6213		CKSQYB106K6R3
	C 6214-6216,6249-6251		CCSRCH101J50
	C 6219		CEJQ100M16
	C 6222,6227		CCSRCH220J50
	C 6223,6225		CEAT330M25
	C 6229		CKSRYB102K50
	C 6230-6232,6239,6246		CKSRYB103K50
	C 6233		CKSRYB472K50
	C 6236,6245,6247		CKSRYB104K16
	C 6237		CEAT100M50
	C 6240-6242,6356		CCSRCH102J50
	C 6243,6244		CEAL220M16
	C 6248		CKSRYB103K50
	C 6303		CKSRYB104K25
	C 6353,6354		CKSRYB822K50

D 232C & CONTROL ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 5801		HIN202EIBNZ
	Q 5801		2SC4154
	Q 5802		DTA114TUA
	Q 5806		2SA1366
	Q 5807		RT1N241M
	D 5804,5805		1SS352
	D 5806,5807		1SS357
	D 5809,5810		SIM-20STS1
	D 5813,5814		MC2848-11
	D 5815,5816		HZU5R1(B2)

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 5803-5807	CHIP SOLID INDUCTOR	QTL1013
	L 5809-5811	CHIP SOLID INDUCTOR	QTL1013
	JA 5801	9P D-SUB SOCKET	AKP1213
	JA 5802,5804-5806	JACK	VKB1243
	JA 5803	MINI JACK(4P) /W SW	XKN3015
	KN 5801,5802	SCREW PLATE	VNE1948
	CN 5801	23P SOCKET	XKP3082

RESISTORS

Mark	No.	Description	Part No.
		All Resistors	RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	U 5801	REMOTE RECEIVER UNIT	GP1UE284QKC1

CAPACITORS

Mark	No.	Description	Part No.
	C 5802,5811,5828		CKSRYB103K50
	C 5803		CCSRCH331J50
	C 5804,5805		CKSRYB102K50
	C 5807-5810		CKSRYB104K16
	C 5812,5829		CEAT101M16
	C 5830,5831		CKSRYB471K50
	C 5832-5834		CCSRCH100D50
	C 5837		CCSRCH101J50

E HDMI NETWORK ASSY (SC-LX81)

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC 11		NJM2846DL3-33
⚠	IC 21		NJM2846DL3-18
⚠	IC 31		NJM2886DL3-33
	IC 101		SII9135CTU
	IC 201		TC74VHC541FTS1
	IC 202		ICS571MLF
	IC 203		TC7WH74FU
	IC 204,205,208		TC7WH157FU
	IC 251		TC74VHC157FTS1
	IC 252		TC7SH08FUS1
	IC 301,351		SII9134CTU
⚠	IC 302,352		NJM2872BF05
	IC 401		ADV7800BSTZ-80
	IC 402		TC7WHU04FU
	IC 501		PEG118A
	IC 502		AYW7254
	IC 504		BU4094BCFV
	IC 505,911,1871		TC74VHC08FTS1
	IC 601		ADV7172KSTZ
	IC 801		AAT4618IGV-0.5-1
	IC 861		RTL8201CP-LF
	IC 881		AYW7255
	IC 891		HY57V281620FTP-6
	IC 921,1861		TC74VHCT08AFTS1
⚠	IC 1001		TPS54350PWP
⚠	IC 1021		LTC3850EGN
⚠	IC 1051		LT3505EMS8E
⚠	IC 1071		NJM2885DL1-05
	IC 1081		TC7WH125FU
	IC 1082		TC7WT125FU
	IC 1151		SII9185ACTU
	IC 1204		S-24CS02AFT
	IC 1208		TC7MB3257FK
	IC 1301		FLI2310-LF-CF
	IC 1351		M12L64322A-6TG
	IC 1381,1383,1384,1402		TC74LCX541FTS1
	IC 1382,1401,1403		TC7SZ125FU
	IC 1404		TC74LCX541FTS1
	IC 1701		UPD61111GM-100UEVA
⚠	IC 1702		NJM2885DL1-15
	IC 1703		KA5SDKAS01TSN
	IC 1901		K4H561638H-UCB3
⚠	IC 1902		S-1132B25-U5
	IC 1903		NJM12904V
	IC 1951		AYW7232
	Q 201		RT1P241M
	Q 301,351,1104,1203		DTC114YUA

Mark	No.	Description	Part No.
	Q 302,352		UMB1N
	Q 631,641,651,661		2SA1602A
	Q 671,681,1801,1811		2SA1602A
⚠	Q 1001		RTQ045N03
⚠	Q 1021,1022		SP8K1
	Q 1204		DTC114YUA
	Q 1281		HN1K02FU
	Q 1821,1831		2SA1602A
	D 301,351		UDZS5R1(B)
	D 551,1701		RB501V-40
⚠	D 1001		RLZ6.8B
	D 1021,1022,1052		RB160VA-40
⚠	D 1023,1024		RLZ5.6B
	D 1051		RB160M-30
	D 1101-1104		DAN202U
	D 1861		1SS352

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 101-104,301-305	CHIP BEADS	ATL7010
	L 105,106	CHIP SOLID INDUCTOR	QTL1013
	L 201	INDUCTOR	CTF1379
	L 202-204	CHIP SOLID INDUCTOR	QTL1013
	L 207,208	CHIP SOLID INDUCTOR	QTL1013
	L 251,252	CHIP SOLID INDUCTOR	QTL1013
	L 306-309,356-359	COIL	ATH7022
	L 351-355,401,402	CHIP BEADS	ATL7010
	L 403,405	CHIP SOLID INDUCTOR	QTL1013
	L 404,406,1001,1021	CHIP BEADS	ATL7010
	L 501,601	CHIP SOLID INDUCTOR	ATL7002
	L 602	CHIP SOLID INDUCTOR	ATL7002
	L 631,641,651,661	INDUCTOR	ATL7015
	L 671,681,1801,1811	INDUCTOR	ATL7015
	L 701,702,805,861	INDUCTOR	CTF1357
	L 704-707	CHIP FERRITE BEADS	ATF1211
	L 801	CHIP FERRITE BEADS	VTL1169
	L 802	COIL	VTH1043
	L 862,871,881,891	INDUCTOR	CTF1357
	L 863,864	COIL	VTH1056
	L 911,936	INDUCTOR	CTF1357
	L 1002	POWER INDUCTOR	ATH7059
	L 1022	INDUCTOR	CTH1261
	L 1023	INDUCTOR	ATH7060
	L 1051,1151-1153	CHIP BEADS	ATL7010
	L 1052	INDUCTOR	ATH7061
	L 1097-1099	INDUCTOR	CTF1386
	L 1301-1305	CHIP SOLID INDUCTOR	ATL7002
	L 1351,1901	CHIP SOLID INDUCTOR	ATL7002
	L 1381-1384	CHIP SOLID INDUCTOR	QTL1013
	L 1401-1404	CHIP SOLID INDUCTOR	QTL1013
	L 1701-1706,1902	FERRITE CORE	VTF1091
	L 1821,1831	INDUCTOR	ATL7015
	L 1861,1871	CHIP SOLID INDUCTOR	QTL1013
	L 1951	FERRITE CORE	VTF1091
	JA 301,351	HDMI CONNECTOR	AKP7225
	JA 701	RJ45 CONNECTOR TRNS	VKN2078
	JA 1101-1104	HDMI CONNECTOR	AKP7225
	X 101	CRYSTAL RESONATOR (28.322 MHz)	ASS7085
	X 401	CRYSTAL RESONATOR (28.63636 MHz)	ASS7069
	X 501	CERAMIC RESONATOR (15.7 MHz)	XSS3004
	X 701	CRYSTAL RESONATOR (24.576 MHz)	XSS3003

Mark	No.	Description	Part No.
	X 702	CRYSTAL RESONATOR (25.0 MHz)	ASS7084
	X 791	CRYSTAL OSCILLATOR (32.768 kHz)	ASS1172
	X 1301	CRYSTAL RESONATOR (13.5 MHz)	ASS7070
	X 1701	CRYSTAL RESONATOR (27.0000 MHz)	BSS1123
	CN 201	23P SOCKET	XKP3083
	CN 502	13P SOCKET	XKP3077
	CN 601	CONNECTOR	CKS4898
	CN 801	CONNECTOR	AKM1276
	CN 902	5P CONNECTOR	VKN1374
	CN 1001	CONNECTOR	CKS3815
	CN 1002	15P SOCKET	XKP3078
	CN 1003	CONNECTOR	CKS1755
	CN 1701	22P CONNECTOR	VKN1426
	CN 1702	CONNECTOR	VKN2040
	JH 1	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
	R 101,103-105,108		RAB4CQ100J
	R 115,204		RAB4CQ680J
	R 119,320,322-330		RAB4CQ473J
	R 130-132,134-136		RAB4CQ100J
	R 141-144		ACN1275
	R 305,355,609,612		RS1/16SS6800F
	R 428,429,789		RAB4CQ330J
	R 432,433,1385-1388		RAB4CQ470J
	R 434,437,442,443		RAB4CQ473J
	R 446,447,450,708		RAB4CQ473J
	R 464,465,467,468		RAB4CQ472J
	R 480-483,741,761		RAB4CQ220J
	R 596		RAB4CQ101J
	R 610,611		RS1/16SS5601F
	R 633,643,653,663		RS1/16SS2200F
	R 634,644,654,664		RS1/16SS4700F
	R 673,683,1702		RS1/16SS2200F
	R 674,684		RS1/16SS4700F
	R 723		RS1/16S5101F
	R 724		RS1/16S3900F
	R 746,747,749		RAB4CQ100J
	R 769,771,1322-1324		RAB4CQ220J
	R 806,977,1031		RS1/16S0R0J
	R 824		RS1/16SS1003F
	R 851-854,1906,1907		RAB4CQ330J
	R 867		RS1/16S2001F
	R 868-871		RS1/16S49R9F
	R 919		RS1/10S102J
	R 1009,1056		RS1/16SS1002F
	R 1011		RS1/16SS2001F
	R 1016,1029,1030,1057		RS1/10S0R0J
	R 1021,1022,1025,1026		ACN7160
	R 1023		RS1/16SS4702F
	R 1024,1027		RS1/16SS1502F
	R 1028		RS1/16SS1202F
	R 1055		RS1/16SS6802F
	R 1071-1074,1905		RS1/16S0R0J
	R 1158,1159		RS1/16SS1501F
	R 1314-1317,1352		RAB4CQ100J
	R 1327,1354-1361,1717		RAB4CQ220J
	R 1389,1729,1730,1740		RAB4CQ560J
	R 1403,1404,1409,1410		RAB4CQ0R0J
	R 1405,1406,1411,1412		RAB4CQ470J

Mark	No. Description	Part No.
	R 1701,1901,1902	RS1/10S0R0J
	R 1703	RS1/16SS1500F
	R 1706,1707	RS1/16SS9100F
	R 1718	RAB4CQ220J
	R 1726	RAB4CQ0R0J
	R 1741,1743,1748,1754	RAB4CQ560J
	R 1755	RAB4CQ560J
	R 1792-1794	RAB4CQ473J
	R 1802,1803,1812,1813	RS1/16SS8200F
	R 1804,1814,1824,1834	RS1/16SS3900F
	R 1822,1823,1832,1833	RS1/16SS8200F
	R 1903,1904	RS1/16SS1001F
	R 1914,1915	RAB4CQ330J
	Other Resistors	RS1/16SS###J

CAPACITORS

Mark	No. Description	Part No.
	C 11,31,322,372	CKSRYB104K16
	C 12,32,1072	CKSQYB225K10
	C 21,106-108,110	CKSSYB104K10
	C 22,1702	CKSQYB475K6R3
	C 23,1703	CEVW221M4
	C 33	CEVW101M6R3
	C 101,102,301,302	DCH1165
	C 103,104,303-305	CKSQYB106K6R3
	C 105,113,121,122	CKSSYB105K6R3
	C 109,111,131,203	CKSSYB103K16
	C 114-120,123-126	CKSSYB104K10
	C 127,463,740,1339	CCSSCH120J50
	C 128,462,741	CCSSCH100D50
	C 129,130,133,306	CKSSYB105K6R3
	C 132,134-139,201	CKSSYB104K10
	C 140-153,155,156	CKSSYB471K50
	C 157,401,402,503,1705,1906	VCH1234
	C 159,160,1400	ACH7306
	C 202	CEVW4R7M35
	C 204,310,360,412	CKSSYB103K16
	C 206-208,211,251	CKSSYB104K10
	C 210,333-336	CKSSYB471K50
	C 216-218,252,421	CKSSYB102K50
	C 219,220,319,369	VCG1063
	C 253,307,309,312	CKSSYB104K10
	C 308,311,313-315	CKSSYB105K6R3
	C 316,317,324,357	CKSSYB104K10
	C 318,356,358,361	CKSSYB105K6R3
	C 320,321,370,371	CKSRYB105K10
	C 325-332,375-382	VCG1066
	C 351,352	DCH1165
	C 353-355,417,430	CKSQYB106K6R3
	C 359,362,366,367	CKSSYB104K10
	C 363-365,368,404	CKSSYB105K6R3
	C 374,403,405-411	CKSSYB104K10
	C 383-386,481-485	CKSSYB471K50
	C 413	CKSSYB823K10
	C 414,435,436,501	CKSSYB103K16
	C 415	CKSRYB824K10
	C 416	CKSSYB393K10
	C 418,420,422-429	CKSSYB104K10
	C 419,434,601,611	CEVW101M16
	C 431,437,438	CKSSYB104K10
	C 432,1157	CKSQYB106K6R3

Mark	No. Description	Part No.
	C 433,505,610,791	CKSSYB105K6R3
	C 439,440,1303,1704	DCH1201
	C 441-443,445-449	CKSSYB104K10
	C 461,502,504,506	CKSSYB104K10
	C 511,551,552	CKSSYB104K10
	C 512,735,1033,1034	CKSSYB102K50
	C 602-609,612,614	CKSSYB104K10
	C 613,934,935,937	CKSSYB103K16
	C 615,617,631,641	CKSSYB104K10
	C 619-622,718,721	CKSSYB471K50
	C 632,642,652,662	CCSSCH101J50
	C 633,643,653,663	CCSSCH560J50
	C 651,661,671,681	CKSSYB104K10
	C 672,682,951	CCSSCH101J50
	C 673,683	CCSSCH560J50
	C 701,702,704-709	CKSSYB104K10
	C 710,742,743	CEVW100M16
	C 711-717,719,722	CKSSYB104K10
	C 720,867,870,883	CEVW220M16
	C 723,936	CEVW470M6R3
	C 724-734,736-739	CKSSYB104K10
	C 744-750,792,860	CKSSYB471K50
	C 801,803-805,1014	CKSRYB104K16
	C 802,807,1302,1305	CEVW101M16
	C 861-865,868,871	CKSSYB104K10
	C 866,869,881,895	CKSSYB471K50
	C 872,874,882	CKSSYB104K10
	C 873	CEVW330M16
	C 875,1015,1046,1047	CCSRCH102J50
	C 891-894,900,911	CKSSYB104K10
	C 897-899,912,921	CKSSYB471K50
	C 922,950,1081,1082	CKSSYB104K10
	C 932	VCH1268
	C 938,1166,1313	CKSSYB103K16
	C 939	CCSSCH180J50
	C 940	CCSSCH150J50
	C 946	CSZS330M6R3
	C 1001	CKSQYB104K25
	C 1002	CEVW101M25
	C 1003,1004,1021,1022	CCG1195
	C 1005,1011	CKSRYB682K25
	C 1006,1039	CCSRCH681J50
	C 1007,1029-1031,1041	CKSRYB104K25
	C 1008	CKSQYB105K16
	C 1009,1052,1151,1156	BCG1059
	C 1023,1027	CCG1233
	C 1024,1026	CKSQYB475K10
	C 1025,1028	CCSRCH101J50
	C 1032	CKSRYB105K10
	C 1035,1040	CKSRYB223K16
	C 1036	CKSRYB222K50
	C 1037	CCSRCH470J50
	C 1038	CCSRCH121J50
	C 1042,1053	CKSRYB104K25
	C 1051	CKSQYB105K25
	C 1054	CCSSCH220J50
	C 1056	CCSRCH151J50
	C 1057,1071,1099,1701	CKSRYB104K16
	C 1101-1104,1352,1363	VCG1063

Mark	No.	Description	Part No.
C	1152-1155,1158-1165		CKSSYB104K10
C	1167,1207,1208,1306		CKSSYB104K10
C	1168-1175,1323,1333		CKSSYB471K50
C	1301,1705,1906		VCH1234
C	1308-1312,1319-1322		CKSSYB104K10
C	1314-1318,1353-1362		CKSSYB105K6R3
C	1324-1332,1335-1338		CKSSYB104K10
C	1334,1343-1348,1350		CKSSYB471K50
C	1340		CCSSCH120J50
C	1341,1381-1384		CKSSYB104K10
C	1342,1708		CEVW101M16
C	1349,1917		CCSSCH471J16
C	1351		ACH7174
C	1364-1368,1385-1388		CKSSYB471K50
C	1369		CKSRYB103K25
C	1399		VCG1063
C	1401-1404,1711-1717		CKSSYB104K10
C	1405-1408,1748-1754		CKSSYB471K50
C	1706,1709,1904,1905		DCH1201
C	1710		CKSRYB104K16
C	1719-1721,1723-1727		CKSSYB104K10
C	1729-1736,1738,1739		CKSSYB104K10
C	1740,1741		CCSSCK1R0C50
C	1742		CKSSYB102K50
C	1743,1745,1746,1801		CKSSYB104K10
C	1747,1907-1915		CKSSYB105K6R3
C	1802,1803,1812,1813		CCSSCH470J50
C	1811,1821,1831,1861		CKSSYB104K10
C	1822,1823,1832,1833		CCSSCH470J50
C	1871,1916,1951		CKSSYB104K10
C	1901-1903		CKSQYB225K10
C	1918-1922		CKSSYB471K50

E HDMI NETWORK ASSY (SC-LX71)

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠ IC	11		NJM2846DL3-33
⚠ IC	21		NJM2846DL3-18
⚠ IC	31		NJM2886DL3-33
IC	101		SII9135CTU
IC	201		TC74VHC541FTS1
IC	202		ICS571MLF
IC	203		TC7WH74FU
IC	204,205,208		TC7WH157FU
IC	251		TC74VHC157FTS1
IC	252		TC7SH08FUS1
IC	351		SII9134CTU
⚠ IC	352		NJM2872BF05
IC	401		ADV7800BSTZ-80
IC	402		TC7WHU04FU
IC	501		PEG118A
IC	502		AYW7254
IC	504		BU4094BCFV
IC	505,911,1871		TC74VHC08FTS1
IC	601		ADV7172KSTZ
IC	801		AAT4618IGV-0.5-1
IC	861		RTL8201CP-LF
IC	881		AYW7255
IC	891		HY57V281620FTP-6
IC	921,1861		TC74VHCT08AFTS1
⚠ IC	1001		TPS54350PWP
⚠ IC	1021		LTC3850EGN
⚠ IC	1051		LT3505EMS8E
⚠ IC	1071		NJM2885DL1-05
IC	1081		TC7WH125FU
IC	1082		TC7WT125FU
IC	1151		SII9185ACTU
IC	1204		S-24CS02AFT
IC	1208		TC7MB3257FK
IC	1301		FLI2310-LF-CF
IC	1351		M12L64322A-6TG
IC	1381,1383,1384,1402		TC74LCX541FTS1
IC	1382,1401,1403		TC7SZ125FU
IC	1404		TC74LCX541FTS1
IC	1701		UPD61111GM-100UEVA
⚠ IC	1702		NJM2885DL1-15
IC	1703		KA5SDKAS01TSN
IC	1901		K4H561638H-UCB3
⚠ IC	1902		S-1132B25-U5
IC	1903		NJM12904V
IC	1951		AYW7232
Q	201		RT1P241M
Q	351,1104,1203,1204		DTC114YUA
Q	352		UMB1N
Q	631,641,651,661		2SA1602A
Q	671,681,1821		2SA1602A
⚠ Q	1001		RTQ045N03
⚠ Q	1021,1022		SP8K1
Q	1281		HN1K02FU
D	351		UDZS5R1(B)
D	551,1701		RB501V-40
⚠ D	1001		RLZ6.8B
D	1021,1022,1052		RB160VA-40
⚠ D	1023,1024		RLZ5.6B
D	1051		RB160M-30
D	1101-1104		DAN202U
D	1861		1SS352

MISCELLANEOUS

Mark	No.	Description	Part No.
L	101-104,351-355	CHIP BEADS	ATL7010
L	105,106	CHIP SOLID INDUCTOR	QTL1013
L	201	INDUCTOR	CTF1379
L	202-204	CHIP SOLID INDUCTOR	QTL1013
L	207,208	CHIP SOLID INDUCTOR	QTL1013
L	251,252	CHIP SOLID INDUCTOR	QTL1013
L	356-359	COIL	ATH7022
L	401,402,404,406	CHIP BEADS	ATL7010
L	403,405	CHIP SOLID INDUCTOR	QTL1013
L	501,601	CHIP SOLID INDUCTOR	ATL7002
L	602	CHIP SOLID INDUCTOR	ATL7002
L	631,641,651,661	INDUCTOR	ATL7015
L	671,681,1821	INDUCTOR	ATL7015
L	701,702,805,861	INDUCTOR	CTF1357
L	704-707	CHIP FERRITE BEADS	ATF1211
L	801	CHIP FERRITE BEADS	VTL1169
L	802	COIL	VTH1043
L	862,871,881,891	INDUCTOR	CTF1357
L	863,864	COIL	VTH1056
L	911,936	INDUCTOR	CTF1357

Mark	No.	Description	Part No.
L	1001,1021,1051	CHIP BEADS	ATL7010
L	1002	POWER INDUCTOR	ATH7059
L	1022	INDUCTOR	CTH1261
L	1023	INDUCTOR	ATH7060
L	1052	INDUCTOR	ATH7061
L	1097-1099	INDUCTOR	CTF1386
L	1151-1153	CHIP BEADS	ATL7010
L	1301-1305	CHIP SOLID INDUCTOR	ATL7002
L	1351,1901	CHIP SOLID INDUCTOR	ATL7002
L	1381-1384	CHIP SOLID INDUCTOR	QTL1013
L	1401-1404	CHIP SOLID INDUCTOR	QTL1013
L	1701-1706,1902	FERRITE CORE	VTF1091
L	1861,1871	CHIP SOLID INDUCTOR	QTL1013
L	1951	FERRITE CORE	VTF1091
JA	351,1101-1104	HDMI CONNECTOR	AKP7225
JA	701	RJ45 CONNECTOR TRNS	VKN2078
X	101	CRYSTAL RESONATOR (28.322 MHz)	ASS7085
X	401	CRYSTAL RESONATOR (28.63636 MHz)	ASS7069
X	501	CERAMIC RESONATOR (15.7 MHz)	XSS3004
X	701	CRYSTAL RESONATOR (24.576 MHz)	XSS3003
X	702	CRYSTAL RESONATOR (25.0 MHz)	ASS7084
X	791	CRYSTAL OSCILLATOR (32.768 kHz)	ASS1172
X	1301	CRYSTAL RESONATOR (13.5 MHz)	ASS7070
X	1701	CRYSTAL RESONATOR (27.0000 MHz)	BSS1123
CN	201	23P SOCKET	XKP3083
CN	502	13P SOCKET	XKP3077
CN	601	CONNECTOR	CKS4898
CN	801	CONNECTOR	AKM1276
CN	902	5P CONNECTOR	VKN1374
CN	1001	CONNECTOR	CKS3815
CN	1002	15P SOCKET	XKP3078
CN	1003	CONNECTOR	CKS1755
CN	1701	22P CONNECTOR	VKN1426
CN	1702	CONNECTOR	VKN2040
JH	1	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
R	101,103-105,108		RAB4CQ100J
R	115,204		RAB4CQ680J
R	119,320,322-330		RAB4CQ473J
R	130-132,134-136		RAB4CQ100J
R	141-144		ACN1275
R	355,609,612		RS1/16SS6800F
R	428,429,789		RAB4CQ330J
R	432,433,1385-1388		RAB4CQ470J
R	434,437,442,443		RAB4CQ473J
R	446,447,450,708		RAB4CQ473J
R	464,465,467,468		RAB4CQ472J
R	480-483,741,761		RAB4CQ220J
R	596		RAB4CQ101J
R	610,611		RS1/16SS5601F
R	633,643,653,663		RS1/16SS2200F
R	634,644,654,664		RS1/16SS4700F
R	673,683,1702		RS1/16SS2200F
R	674,684		RS1/16SS4700F
R	723		RS1/16S5101F
R	724		RS1/16S3900F
R	746,747,749		RAB4CQ100J
R	769,771,1322-1324		RAB4CQ220J
R	806,977,1031		RS1/16S0R0J
R	824		RS1/16SS1003F
R	851-854,1906,1907		RAB4CQ330J
R	867		RS1/16S2001F
R	868-871		RS1/16S49R9F
R	919		RS1/10S102J
R	1009,1056		RS1/16SS1002F
R	1011		RS1/16SS2001F
R	1016,1029,1030,1057		RS1/10S0R0J
R	1021,1022,1025,1026		ACN7160
R	1023		RS1/16SS4702F
R	1024,1027		RS1/16SS1502F
R	1028		RS1/16SS1202F
R	1055		RS1/16SS6802F
R	1071-1074,1905		RS1/16S0R0J
R	1158,1159		RS1/16SS1501F
R	1314-1317,1352		RAB4CQ100J
R	1327,1354-1361,1717		RAB4CQ220J
R	1389,1729,1730,1740		RAB4CQ560J
R	1403,1404,1409,1410		RAB4CQ0R0J
R	1405,1406,1411,1412		RAB4CQ470J
R	1701,1901,1902		RS1/10S0R0J
R	1703		RS1/16SS1500F
R	1706,1707		RS1/16SS9100F
R	1718		RAB4CQ220J
R	1726		RAB4CQ0R0J
R	1741,1743,1748,1754		RAB4CQ560J
R	1755		RAB4CQ560J
R	1792-1794		RAB4CQ473J
R	1822,1823		RS1/16SS8200F
R	1824		RS1/16SS3900F
R	1903,1904		RS1/16SS1001F
R	1914,1915		RAB4CQ330J
	Other Resistors		RS1/16SS###J

CAPACITORS

Mark	No.	Description	Part No.
C	11,31,372,801		CKSRYB104K16
C	12,32,1072		CKSQYB225K10
C	21,106-108,110		CKSSYB104K10
C	22,1702		CKSQYB475K6R3
C	23,1703		CEVW221M4
C	33		CEVW101M6R3
C	101,102,351,352		DCH1165
C	103,104,353-355		CKSQYB106K6R3
C	105,113,121,122		CKSSYB105K6R3
C	109,111,131,203		CKSSYB103K16
C	114-120,123-126		CKSSYB104K10
C	127,463,740,1339		CCSSCH120J50
C	128,462,741		CCSSCH100D50
C	129,130,133,356		CKSSYB105K6R3
C	132,134-139,201		CKSSYB104K10
C	140-153,155,156		CKSSYB471K50
C	157,401,402,503,1705,1906		VCH1234
C	159,160,1400		ACH7306
C	202		CEVW4R7M35
C	204,360,412,414		CKSSYB103K16
C	206-208,211,251		CKSSYB104K10
C	210,383-386		CKSSYB471K50
C	216-218,252,421		CKSSYB102K50
C	219,220,369		VCG1063
C	253,357,359,362		CKSSYB104K10

Mark	No.	Description	Part No.
C	358,361,363-365		CKSSYB105K6R3
C	366,367,374,403		CKSSYB104K10
C	368,404,433,505		CKSSYB105K6R3
C	370,371,1032		CKSRYB105K10
C	375-382		VCG1066
C	405-411,418,420		CKSSYB104K10
C	413		CKSSYB823K10
C	415		CKSRYB824K10
C	416		CKSSYB393K10
C	417,430,432,1157		CKSQYB106K6R3
C	419,434,601,611		CEVW101M16
C	422-429,431,437		CKSSYB104K10
C	435,436,501,613		CKSSYB103K16
C	438,441-443		CKSSYB104K10
C	439,440,1303,1704		DCH1201
C	445-449,461,502		CKSSYB104K10
C	481-485,619-622		CKSSYB471K50
C	504,506,511,551		CKSSYB104K10
C	512,735,1033,1034		CKSSYB102K50
C	552,602-609,612		CKSSYB104K10
C	610,791,1314-1318		CKSSYB105K6R3
C	614,615,617,631		CKSSYB104K10
C	632,642,652,662		CCSSCH101J50
C	633,643,653,663		CCSSCH560J50
C	641,651,661,671		CKSSYB104K10
C	672,682,951		CCSSCH101J50
C	673,683		CCSSCH560J50
C	681,701,702		CKSSYB104K10
C	704-709,711-717		CKSSYB104K10
C	710,742,743		CEVW100M16
C	718,721,744-750		CKSSYB471K50
C	719,722,724-734		CKSSYB104K10
C	720,867,870,883		CEVW220M16
C	723,936		CEVW470M6R3
C	736-739,861-865		CKSSYB104K10
C	792,860,866,869		CKSSYB471K50
C	802,807,1302,1305		CEVW101M16
C	803-805,1014,1057		CKSRYB104K16
C	868,871,872,874		CKSSYB104K10
C	873		CEVW330M16
C	875,1015,1046,1047		CCSRCH102J50
C	881,895,897-899		CKSSYB471K50
C	882,891-894,900		CKSSYB104K10
C	911,922,950,1081		CKSSYB104K10
C	912,921,1168-1175		CKSSYB471K50
C	932		VCH1268
C	934,935,937,938		CKSSYB103K16
C	939		CCSSCH180J50
C	940		CCSSCH150J50
C	946		CSZS330M6R3
C	1001		CKSQYB104K25
C	1002		CEVW101M25
C	1003,1004,1021,1022		CCG1195
C	1005,1011		CKSRYB682K25
C	1006,1039		CCSRCH681J50
C	1007,1029-1031,1041		CKSRYB104K25
C	1008		CKSQYB105K16
C	1009,1052,1151,1156		BCG1059
C	1023,1027		CCG1233
C	1024,1026		CKSQYB475K10
C	1025,1028		CCSRCH101J50
C	1035,1040		CKSRYB223K16
C	1036		CKSRYB222K50
C	1037		CCSRCH470J50
C	1038		CCSRCH121J50
C	1042,1053		CKSRYB104K25
C	1051		CKSQYB105K25
C	1054		CCSSCH220J50
C	1056		CCSRCH151J50
C	1071,1099,1701,1710		CKSRYB104K16
C	1082,1152-1155		CKSSYB104K10
C	1101-1104,1352,1363		VCG1063
C	1158-1165,1167,1207		CKSSYB104K10
C	1166,1313		CKSSYB103K16
C	1208,1306,1308-1312		CKSSYB104K10
C	1301,1705,1906		VCH1234
C	1319-1322,1324-1332		CKSSYB104K10
C	1323,1333,1334		CKSSYB471K50
C	1335-1338,1341		CKSSYB104K10
C	1340		CCSSCH120J50
C	1342,1708		CEVW101M16
C	1343-1348,1350		CKSSYB471K50
C	1349,1917		CCSSCH471J16
C	1351		ACH7174
C	1353-1362,1747		CKSSYB105K6R3
C	1364-1368,1385-1388		CKSSYB471K50
C	1369		CKSRYB103K25
C	1381-1384,1401-1404		CKSSYB104K10
C	1399		VCG1063
C	1405-1408,1748-1754		CKSSYB471K50
C	1706,1709,1904,1905		DCH1201
C	1711-1717,1719-1721		CKSSYB104K10
C	1723-1727,1729-1736		CKSSYB104K10
C	1738,1739,1743,1745		CKSSYB104K10
C	1740,1741		CCSSCK1R0C50
C	1742		CKSSYB102K50
C	1746,1821,1861,1871		CKSSYB104K10
C	1822,1823		CCSSCH470J50
C	1901-1903		CKSQYB225K10
C	1907-1915		CKSSYB105K6R3
C	1916,1951		CKSSYB104K10
C	1918-1922		CKSSYB471K50

F INTERFACE ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠ D	7101		D3SBA20(B)

MISCELLANEOUS

Mark	No.	Description	Part No.
H	7101,7102	FUSE CLIP	AKR7001
J	7061	JUMPER WIRE	D20PDY0415E
KN	7001-7006	WRAPPING TERMINAL	VNF1084
CN	7001	7P PLUG	XKP3063
CN	7002,7005,7006	CONNECTOR	CKS1730
CN	7003,7004	CONNECTOR	CKS1727
CN	7007	PLUG	CKS1724
CN	7008,7014,7021	23P PLUG	XKP3071
CN	7009,7013	CONNECTOR	CKS3813
CN	7011	15P PLUG	XKP3067

Mark	No.	Description	Part No.
	CN 7012	CONNECTOR	CKS1721
	CN 7031	27P CONNECTOR	VKN1258
	CN 7032,7042	CONNECTOR	CKS3384
	CN 7041	CONNECTOR	CKS3386
	CN 7051	CONNECTOR	CKS3382
	CN 7062	CONNECTOR	CKS3380
	CN 7101	2P TOP POST	B2B-EH

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	JH 7002-7005	PCB BINDER	VEF1040
	JH 7061	4P CABLE HOLDER	51048-0400
	JP 7071	4P HOUSING ASSY	ADX7676
	JP 7102	HOUSING ASSY	ADX7635
	JP 7103	HOUSING ASSY	ADX7634
	JP 7104	HOUSING ASSY	ADX7636

CAPACITORS

Mark	No.	Description	Part No.
	C 7101		CFTLA394J50
	C 7102,7105-7109		CCSRCH102J50
	C 7104		CEAT682M25

G COMPONENT ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 6001-6004		TC74LVX4052FT
	IC 6005		TC74LVX4053FT
	IC 6006		LA7213
	IC 6007,6008		NJM2581M
	IC 6009,6012		TC4094BFN
	IC 6010,6013-6015		TC74VHCT08AFTS1
	Q 6001-6007,6017,6018		2SA1602A
	Q 6008,6019,6021		RT1N241M
⚠	Q 6015		2SC4154
⚠	Q 6016		2SA1602A
	Q 6020		2SA1602A
	D 6001		1SS352
	D 6002,6003		RR264M-400
	D 6010		UDZS5R1(B)

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 6001	CHIP SOLID INDUCTOR	ATL7002
	JA 6001	PIN JACK(3P)	AKB7203
	JA 6002,6003	PIN JACK(6P)	AKB7204
	JA 6004	JACK	AKN-209
	KN 6001	SCREW PLATE	VNE1948
	CN 6002	PLUG	CKS3545
	CN 6004	13P PLUG	XKP3066
	CN 6006	16P CONNECTOR	VKN1420
	CN 6007	5P HOUSING ASSY	ADX7654
	CN 6008	5P HOUSING ASSY	ADX7674
	CN 6009	30P SOCKET	XKP3092

RESISTORS

Mark	No.	Description	Part No.
	R 6007,6012,6017		RS1/16S1103D
	Other Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
	C 6004,6048,6049,6060		CCSRCH102J50
	C 6012,6013,6016,6017		CKSRYB103K50
	C 6018,6021,6024		CEAT100M50
	C 6019,6020,6022,6023		CKSRYB103K50
	C 6025		CEAT3R3M50
	C 6026,6027,6111,6112		CKSRYB103K50
	C 6028,6038,6039		CEAT101M10
	C 6043-6045,6050,6051		CEAT101M10
	C 6046,6047,6058,6059		CKSRYB105K10
	C 6055-6057		CEAT101M10
	C 6061,6065,6069,6071		CCSRCH102J50
	C 6064,6070,6072,6074		CKSRYB105K10
	C 6068		CKSRYB105K16
	C 6073,6075,6085,6087		CCSRCH102J50
	C 6084,6086,6088,6091		CKSRYB105K10
	C 6089,6092,6095,6100		CCSRCH102J50
	C 6090,6093		ACH1479
	C 6094,6099,6101,6105		CKSRYB105K10
	C 6096,6103,6104,6143		CEAT101M16
	C 6097,6098		CKSRYB224K10
	C 6102,6106,6108,6138		CCSRCH102J50
	C 6107,6137,6147,6148		CKSRYB105K10
	C 6110,6115-6117		CKSRYB104K16
	C 6113,6114,6121-6124		CCSRCH100D50
	C 6125-6136,6184		CKSRYB103K50
	C 6144,6174,6176,6177		CEAT101M16
	C 6146,6149,6150,6153		CCSRCH102J50
	C 6151,6152,6155,6157		CKSRYB105K10
	C 6154,6156,6159,6160		CCSRCH102J50
	C 6158,6161,6162,6165		CKSRYB105K10
	C 6163,6164,6172,6173		CCSRCH102J50
	C 6175,6181,6197-6199		CCSRCH100D50
	C 6179,6180,6182,6183		CEAT101M16
	C 6185,6187		CKSRYB105K10
	C 6186,6188,6196		CCSRCH102J50
	C 6189-6191		CEAT100M50

H COMPOSITE S ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 6501,6512		TC4094BFN
	IC 6502,6513		LA7109
	IC 6505,6506,6508,6509		TC74HC4051AFT
	IC 6510		LA7213
	IC 6511		TC74HC4053AFT
	IC 6516-6518		NJM2505AF
	Q 6501-6508		IMX25
	Q 6509		2SA1602A
	Q 6510		RT1N241M
	Q 6516,6524,6525		2SC4154
	D 6501		1SS352
	D 6502,6503		RR264M-400
	D 6504-6508		DAN217U

MISCELLANEOUS

Mark	No.	Description	Part No.
	JA 6501,6502	PIN JACK(4P)	XKB3017
	JA 6503	COMB.JACK(S+1P)	AKB7199
	JA 6504-6507	COMB.JACK(2S+2P)	AKB7200
	JA 6509	JACK	XKB3069
	KN 6501-6503	SCREW PLATE	VNE1948
	CN 6501	CONNECTOR	CKS3374
	CN 6502	19P CONNECTOR	52044-1945
	CN 6503	PLUG	CKS3545

RESISTORS

Mark	No.	Description	Part No.
		All Resistors	RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
C	6501,6503,6509,6547		CKSRYB105K10
C	6502,6504,6506,6508		CCSRCH102J50
C	6505,6507,6670-6673		CKSRYB105K16
C	6510,6548,6550-6555		CCSRCH102J50
C	6511,6512,6519,6520		CCSRCH101J50
C	6517,6518,6525,6526		CCSRCH331J50
C	6527,6528,6535,6536		CCSRCH101J50
C	6533,6534,6541,6542		CCSRCH331J50
C	6544,6599,6600,6605		CKSRYB103K50
C	6549,6556,6558,6567		CEAT101M10
C	6557,6559,6566,6568		CKSRYB104K16
C	6560-6565,6576,6578		CCSRCH181J50
C	6581,6586,6587,6601		CEAT101M10
C	6584,6585		CCSRCH181J50
C	6598		CEAT100M50
C	6602-6604,6641,6643		CKSRYB104K16
C	6606,6608,6609,6611		CKSRYB103K50
C	6607,6610,6613		CEAT220M50
C	6612,6648,6694,6698		CKSRYB103K50
C	6620,6621,6662-6667		CEAT101M16
C	6624		CKSRYB105K10
C	6625,6634-6639,6660		CCSRCH102J50
C	6640,6642		CEAT101M10
C	6650-6655,6689		CCSRCH100D50
C	6661,6668,6669,6674		CCSRCH102J50
C	6675,6679-6681		CCSRCH102J50
C	6676-6678,6682-6684		CKSRYB105K16
C	6685-6687,6692,6693		CCSRCH102J50
C	6688		CEAT101M16
C	6690,6691		CKSRYB105K16
C	6696,6697,6699,6700		CKSQYB106K6R3
C	6701,6704		CKSRYB103K50
C	6702,6703		CKSQYB106K6R3
C	6708-6710,6712		CEAT220M50
C	6714-6716		CEAT220M50
C	6717-6722		CKSRYB104K16

I FRONT BRIDGE ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
CN	7701	PLUG(6P)	KM200NA6R
CN	7704	19P CONNECTOR	52044-1945
CN	7705,7708	CONNECTOR	CKS3374
CN	7706	CONNECTOR	CKS3378
CN	7707	CONNECTOR	CKS3382
CN	7709	PLUG(3P)	KM200NA3
CN	7710	27P CONNECTOR	VKN1287
	7701	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
		All Resistors	RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
JH	7702	PCB BINDER	VEF1040

CAPACITORS

Mark	No.	Description	Part No.
C	7702,7704		CCSRCH102J50
C	7703		CKSRYB103K50
C	7711-7714		CCSRCH100D50
C	7715		CCSRCH181J50

J V-BRIDGE ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
CN	8601,8602	CONNECTOR	CKS3573

CAPACITORS

Mark	No.	Description	Part No.
C	8602-8604		CKSRYB103K50

K DISPLAY ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
IC	8001		PDC179A8
IC	8002		GP1UE274XKC1
⚠ IC	8004		S-1200B33-M5
IC	8201		PE5615A
Q	8001-8007		RT1N431M
Q	8009		2SA1602A
Q	8010		RT1N241M
Q	8012		2SK2034
D	8001,8003,8005,8007		SLR-343VC(NPQ)
D	8009,8013		SLR343BC4T(JKLM)
D	8011		SLR343WBCT(MNPQ)
D	8015,8016,8202		1SS352
D	8017,8201		MC2848-11
D	8019		RB751V-40
D	8020		1SS302

MISCELLANEOUS

Mark	No.	Description	Part No.
L	8201	INDUCTOR	CTF1385
J	9201	3P JUMPER WIRE	D20PDD0305E
J	9203	4PJUMPER WIRE	D20PDD0410E
KN	8201	FL HOLDER(FE)	VNF1096
V	8201	FL TUBE DISPLAY	AAV7113
S	8001-8012,8015-8020	SWITCH	VSG1024
S	8023	SWITCH	VSG1024
S	8024	ROTARY ENCODER	ASX7051
X	8002	CRYSTAL OSCILLATOR CRYSTAL OSC (15.0 MHz)	CSS1653
X	8201	CERAMIC RESONATOR (5.00 MHz)	VSS1142
CN	8001	29P CONNECTOR	VKN1872
CN	8002	9P CONNECTOR	VKN1269

RESISTORS

Mark	No.	Description	Part No.
		All Resistors	RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
JH	8001	3P CABLE HOLDER	51048-0300
JH	8003	4P CABLE HOLDER	51048-0400
JH	8201	6P HOUSING ASSY	ADX7675

CAPACITORS

Mark	No.	Description	Part No.
C	8001-8007		CCSRCH101J50
C	8008		CCSRCH471J50
C	8009,8015,8016,8018		CKSRYB104K16
C	8012,8013		CCSRCH150J50
C	8014,8030,8031,8228		CKSRYB105K10
C	8019-8021,8202,8223		CKSRYB102K50
C	8022,8027,8034,8035		CKSRYB103K50
C	8023,8025,8026,8233		CCSRCH102J50
C	8024		ACH7272

Mark	No.	Description	Part No.
	C 8032,8033,8036,8224		CKSRYB104K16
	C 8037		CCSRCH151J50
	C 8201,8230		CKSRYB104K50
	C 8203		CEAT101M35
	C 8204-8220,8226		CKSRYB471K50
	C 8221		ACH7268
	C 8222,8232		CKSRYB103K50
	C 8225,8227		CKSRYB104K16
	C 8229		CKSRYB102K50
	C 8231		CEAT470M50

L VOL ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
	S 8401	ROTARY ENCODER	ASX7049
	JH 8401	3P CABLE HOLDER	51048-0300

CAPACITORS

Mark	No.	Description	Part No.
	C 8401,8402		CKSRYB103K50

M POWER SW ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	Q 8501		RT1N431M
	D 8502		SLR343BC4T(JKLM)

MISCELLANEOUS

Mark	No.	Description	Part No.
	S 8501	SWITCH	VSG1024

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	JH 8501	4P CABLE HOLDER	51048-0400

CAPACITORS

Mark	No.	Description	Part No.
	C 8501		CCSRCH101J50

N PRE BRIDGE ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
	CN 6951	19P CONNECTOR	52044-1945
	CN 6952	21P PLUG	XKP3070
	CN 6953	FLOATING CONNECTOR	AKP7227

O ICE BUFFER ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 6800,6820,6840,6860		UPC4570G2-A
	IC 6880,6900,6920		UPC4570G2-A

MISCELLANEOUS

Mark	No.	Description	Part No.
	J 6800	JUMPER WIRE	D20PDY0410E
	KN 6800,6801	SCREW PLATE	VNE1948
	CN 6800	FLOATING CONNECTOR	AKM7086
	CN 6810	19P PLUG	XKP3069
	CN 6820	17P PLUG	XKP3068
	CN 6830	5P SOCKET	XKP3073
	JH 6800	4P CABLE HOLDER	51048-0400

RESISTORS

Mark	No.	Description	Part No.
	R 6810,6811,6830,6831		RN1/16SC10R0D
	R 6850,6851,6870,6871		RN1/16SC10R0D
	R 6890,6891,6910,6911		RN1/16SC10R0D
	R 6930,6931		RN1/16SC10R0D
	Other Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
	C 6801,6802,6821,6822		CEJQ221M16
	C 6803,6804,6823,6824		CFHXSQ103J16
	C 6807,6808,6817,6818		CCSRCH102J50
	C 6827,6828,6837,6838		CCSRCH102J50
	C 6841,6842,6861,6862		CEJQ221M16
	C 6843,6844,6863,6864		CFHXSQ103J16
	C 6847,6848,6857,6858		CCSRCH102J50
	C 6867,6868		CCSRCH102J50
	C 6881,6882,6901,6902		CEJQ221M16
	C 6883,6884,6903,6904		CFHXSQ103J16
	C 6921,6922		CEJQ221M16
	C 6923,6924		CFHXSQ103J16

P ICE INTERFACE ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
	CN 3800	19P SOCKET	XKP3080
	CN 3801	17P SOCKET	XKP3079
	CN 3810,3840,3870	5P SOCKET	XKP3073
	CN 3820,3830,3850,3860	PLUG	CKS1750

Q ICEPOWER AMP ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 4000,4001		BU7262SFVM
	IC 4003		TC74VHC04FTS1
	IC 4004		TC74VHC08FTS1
	IC 4005		HA17431GLTPA
	IC 4006		TC7WH08FU
⚠	IC 4101,4201,4301,4401		ICC3-AVR
	IC 4200,4400,4600,4700		ICC1-AVR
	IC 4202,4402,4602,4702		UPC4570G2-A
	IC 4203,4403,4603,4703		NJM4565MD
	IC 4204,4404,4604,4704		NJM12904V
⚠	IC 4501,4601,4701		ICC3-AVR
⚠	IC 4900		NJM1431AU
	Q 4000,4002,4003		RT1N241M
	Q 4001,4111,4211,4311		2SA1602A
	Q 4004,4006,4008,4010		RT1P241M
	Q 4005,4007,4009,4011		RT1N140M
	Q 4012,4013		RT3AMMM
	Q 4014,4016		HN1C01FU
	Q 4015,4109,4209,4309		2SC4154
⚠	Q 4100,4101,4200,4201		PHB45NQ15T
	Q 4102,4104,4202,4204		2SC5738
	Q 4103,4105,4203,4205		2SA2061
	Q 4106,4107,4206,4207		2SA1682
	Q 4108,4208,4308,4408		2SD2704K
	Q 4110,4210,4310,4410		2SA1514K
	Q 4112,4312,4512,4712		RT1N140M
⚠	Q 4300,4301,4400,4401		PHB45NQ15T
	Q 4302,4304,4402,4404		2SC5738
	Q 4303,4305,4403,4405		2SA2061
	Q 4306,4307,4406,4407		2SA1682
	Q 4409,4509,4609,4709		2SC4154
	Q 4411,4511,4611,4711		2SA1602A

Mark	No. Description	Part No.
⚠ Q	4500,4501,4600,4601	PHB45NQ15T
Q	4502,4504,4602,4604	2SC5738
Q	4503,4505,4603,4605	2SA2061
Q	4506,4507,4606,4607	2SA1682
Q	4508,4608,4708	2SD2704K
Q	4510,4610,4710	2SA1514K
⚠ Q	4700,4701	PHB45NQ15T
Q	4702,4704	2SC5738
Q	4703,4705	2SA2061
Q	4706,4707	2SA1682
D	4001-4005,4007-4014	1SS352
D	4100,4200,4300,4400	1SS302
D	4101,4102,4201,4202	RB161VA-20
D	4103-4107,4203-4207	RF051VA2S
D	4108,4109,4208,4209	RF101L2S
D	4110,4210,4310,4410	1SS352
D	4301,4302,4401,4402	RB161VA-20
D	4303-4307,4403-4407	RF051VA2S
D	4308,4309,4408,4409	RF101L2S
D	4500,4600,4700	1SS302
D	4501,4502,4601,4602	RB161VA-20
D	4503-4507,4603-4607	RF051VA2S
D	4508,4509,4608,4609	RF101L2S
D	4510,4610,4710,4810	1SS352
D	4701,4702	RB161VA-20
D	4703-4707	RF051VA2S
D	4708,4709	RF101L2S

MISCELLANEOUS

Mark	No. Description	Part No.
L	4100,4200,4300,4400 COIL	ATL7017
L	4101,4201,4301 COMMON MODE COIL	ATL7022
L	4102,4103,4202,4203 INDUCTOR	ATL7018
L	4104,4204,4304 CHIP INDUCTOR	ATL7020
L	4302,4303,4402,4403 INDUCTOR	ATL7018
L	4401,4501,4601 COMMON MODE COIL	ATL7022
L	4404,4504,4604 CHIP INDUCTOR	ATL7020
L	4500,4600,4700 COIL	ATL7017
L	4502,4503,4602,4603 INDUCTOR	ATL7018
L	4701 COMMON MODE COIL	ATL7022
L	4702,4703 INDUCTOR	ATL7018
L	4704 CHIP INDUCTOR	ATL7020
L	4902,4903 CHIP COIL	ATL7016
JA	4101 SP TERMINAL 6-P(V0)	AKE7138
JA	4301,4501 SP TERMINAL 4-P(V0)	AKE7136
KN	4100,4200,4300,4400 SCREW PLATE	VNE1948
RY	4100,4300,4500,4700 RELAY	ASR7001
CN	4000 CONNECTOR	CKS3382
CN	4100,4200,4400,4500 CONNECTOR	CKS1716
CN	4300,4600,4700 5P PLUG	XKP3062
CN	4900 4P-TOP POST(VH)	B4P-VH
CN	4901 PLUG(2P)	KM200NA2
CN	4902 PLUG(4P)	KM200NA4
CN	4903 PLUG(6P)	KM200NA6
	4100,4200,4300,4400,4500,4600,4700 COIL SHIELD 60(MTL)	ANK7139

RESISTORS

Mark	No. Description	Part No.
R	4057	RS1/8SQ471J
R	4060,4139,4239,4339	RS1/16S5602F
R	4061	RS1/16S3302F
R	4100,4101,4200,4201	RN1/16SE1000D
R	4102,4103,4202,4203	RN1/16SE9100D
R	4104,4105,4204,4205	RN1/16SE1001D
R	4123,4125,4167,4223	RS1/16S1001F
R	4124,4224,4324,4424	RS1/16S2702F
R	4126,4127,4226,4227	RS1/16S1501F
R	4128,4228,4328,4428	RS1/10S2702F
R	4129,4229,4329,4429	RS1/8SQ1R0J
R	4130,4230,4330,4430	RS1/8SQ4702F
R	4131,4231,4331,4431	RS1/8SQ6802F
R	4132,4232,4332,4432	RS1/16S1802F
R	4133,4135,4156,4176	RS1/16S1801F
R	4134,4234,4334,4434	RS1/16S1201F
R	4136,4236,4336,4436	RS1/16S1502F
R	4137,4237,4337,4437	RS1/4SA2702F
R	4138,4238,4338,4438	RS1/16S2701F
R	4145,4150,4245,4250	RS1/10S1002F
R	4146,4246,4346,4446	RS1/16S3902F
R	4147-4149,4161,4162	ACN7165
R	4151,4152,4251,4252	ACN7162
R	4153,4253,4353,4453	RS1/10S334J
R	4154,4254,4354,4454	ACN7161
R	4155,4255,4355,4455	RS1/10S1502F
R	4163,4263,4363,4463	RS1/4SA1053F
R	4164,4264,4364,4464	RS1/16S3301F
R	4166,4266,4366,4466	RS1/16S1002F
R	4168,4268,4368,4468	RS1/16S2202F
R	4169,4269,4369,4469	RS1/16S1202F
R	4177,4277,4377,4477	RS1/4SA2002F
R	4225,4267,4323,4325	RS1/16S1001F
R	4233,4235,4256,4276	RS1/16S1801F
R	4247-4249,4261,4262	ACN7165
R	4300,4301,4400,4401	RN1/16SE1000D
R	4302,4303,4402,4403	RN1/16SE9100D
R	4304,4305,4404,4405	RN1/16SE1001D
R	4326,4327,4426,4427	RS1/16S1501F
R	4333,4335,4356,4376	RS1/16S1801F
R	4345,4350,4445,4450	RS1/10S1002F
R	4347-4349,4361,4362	ACN7165
R	4351,4352,4451,4452	ACN7162
R	4367,4423,4425,4467	RS1/16S1001F
R	4433,4435,4456,4476	RS1/16S1801F
R	4439,4539,4639,4739	RS1/16S5602F
R	4447-4449,4461,4462	ACN7165
R	4500,4501,4600,4601	RN1/16SE1000D
R	4502,4503,4602,4603	RN1/16SE9100D
R	4504,4505,4604,4605	RN1/16SE1001D
R	4523,4525,4567,4623	RS1/16S1001F
R	4524,4624,4724	RS1/16S2702F
R	4526,4527,4626,4627	RS1/16S1501F
R	4528,4628,4728	RS1/10S2702F
R	4529,4629,4729	RS1/8SQ1R0J
R	4530,4630,4730	RS1/8SQ4702F
R	4531,4631,4731	RS1/8SQ6802F
R	4532,4632,4732	RS1/16S1802F
R	4533,4535,4556,4576	RS1/16S1801F
R	4534,4634,4734	RS1/16S1201F
R	4536,4636,4736	RS1/16S1502F
R	4537,4637,4737	RS1/4SA2702F
R	4538,4638,4738	RS1/16S2701F
R	4545,4550,4645,4650	RS1/10S1002F

Mark	No. Description	Part No.
R	4546,4646,4746	RS1/16S3902F
R	4547-4549,4561,4562	ACN7165
R	4551,4552,4651,4652	ACN7162
R	4553,4653,4753	RS1/10S334J
R	4554,4654,4754	ACN7161
R	4555,4655,4755	RS1/10S1502F
R	4563,4663,4763,4863	RS1/4SA1053F
R	4564,4664,4764,4864	RS1/16S3301F
R	4566,4666,4766,4900	RS1/16S1002F
R	4568,4668,4768	RS1/16S2202F
R	4569,4669,4769	RS1/16S1202F
R	4577,4677,4777	RS1/4SA2002F
R	4625,4667,4723,4725	RS1/16S1001F
R	4633,4635,4656,4676	RS1/16S1801F
R	4647-4649,4661,4662	ACN7165
R	4700,4701	RN1/16SE1000D
R	4702,4703	RN1/16SE9100D
R	4704,4705	RN1/16SE1001D
R	4726,4727	RS1/16S1501F
R	4733,4735,4756,4776	RS1/16S1801F
R	4745,4750	RS1/10S1002F
R	4747-4749,4761,4762	ACN7165
R	4751,4752	ACN7162
R	4767	RS1/16S1001F
R	4901	RS1/16S3301F
R	4902	RS2LMF682J
	Other Resistors	RS1/16S###J

CAPACITORS

Mark	No. Description	Part No.
C	4001-4004,4011-4021	CCSRCH102J25
C	4005,4006,4026,4027	CKSRYB104K16
C	4010,4036,4916,4917	CEHAT331M10
C	4022,4025,4029,4040	CKSRYB105K10
C	4023	CKSYB106K10
C	4024	CEHAT101M10
C	4028,4926	CKSRYB103K25
C	4031-4035,4041,4121	CKSRYB104K16
C	4100,4200,4300,4400	CFTNA104J2A
C	4101,4201,4301,4401	CFTNA274J2A
C	4104,4105,4204,4205	ACG7069
C	4106,4107,4206,4207	ACG7072
C	4108,4208,4308,4408	CEHAT221M25
C	4109,4209,4309,4409	CFHXSQ103J16
C	4112,4113,4117,4212	ACH1479
C	4114,4214,4314,4414	ACG7068
C	4115,4118,4120,4130	CKSRYB105K10
C	4116,4151,4216,4251	CKSRYB105K16
C	4119,4219,4319,4419	CKSQYB474K16
C	4122,4128,4222,4228	ACG7073
C	4123,4223,4323,4423	ACG7066
C	4124,4224,4324,4424	ACG7078
C	4125,4225,4325,4425	ACG7071
C	4126,4226,4326,4426	ACG7079
C	4127,4227,4327,4427	ACG7070
C	4129,4152,4153,4156	CKSRYB104K16
C	4131,4132,4231,4232	CKSQYB224K25
C	4133,4233,4333,4433	ACG7064
C	4134,4234,4334,4434	ACG7063
C	4135-4138,4235-4238	ACG7065

Mark	No. Description	Part No.
C	4141,4142,4241,4242	CCG1245
C	4143-4146,4243-4246	CCG1248
C	4147,4148,4215,4218	CKSRYB105K10
C	4149,4150,4249,4250	ACH7304
C	4155,4255,4355,4455	CKSYB475K25
C	4157,4257,4357,4457	CKSRYB222K50
C	4160,4260,4360,4460	CCSRCH102J50
C	4213,4217,4312,4313	ACH1479
C	4220,4230,4247,4248	CKSRYB105K10
C	4221,4229,4252,4253	CKSRYB104K16
C	4258,4321,4329,4352	CKSRYB104K16
C	4304,4305,4404,4405	ACG7069
C	4306,4307,4406,4407	ACG7072
C	4315,4318,4320,4330	CKSRYB105K10
C	4316,4351,4416,4451	CKSRYB105K16
C	4317,4412,4413,4417	ACH1479
C	4322,4328,4422,4428	ACG7073
C	4331,4332,4431,4432	CKSQYB224K25
C	4335-4338,4435-4438	ACG7065
C	4341,4342,4441,4442	CCG1245
C	4343-4346,4443-4446	CCG1248
C	4347,4348,4415,4418	CKSRYB105K10
C	4349,4350,4449,4450	ACH7304
C	4353,4356,4421,4429	CKSRYB104K16
C	4420,4430,4447,4448	CKSRYB105K10
C	4452,4453,4458,4521	CKSRYB104K16
C	4500,4600,4700	CFTNA104J2A
C	4501,4601,4701	CFTNA274J2A
C	4504,4505,4604,4605	ACG7069
C	4506,4507,4606,4607	ACG7072
C	4508,4608,4708,4808	CEHAT221M25
C	4509,4609,4709,4809	CFHXSQ103J16
C	4512,4513,4517,4612	ACH1479
C	4514,4614,4714	ACG7068
C	4515,4518,4520,4530	CKSRYB105K10
C	4516,4551,4616,4651	CKSRYB105K16
C	4519,4619,4719	CKSQYB474K16
C	4522,4528,4622,4628	ACG7073
C	4523,4623,4723	ACG7066
C	4524,4624,4724	ACG7078
C	4525,4625,4725	ACG7071
C	4526,4626,4726	ACG7079
C	4527,4627,4727	ACG7070
C	4529,4552,4553,4556	CKSRYB104K16
C	4531,4532,4631,4632	CKSQYB224K25
C	4533,4633,4733	ACG7064
C	4534,4634,4734	ACG7063
C	4535-4538,4635-4638	ACG7065
C	4541,4542,4641,4642	CCG1245
C	4543-4546,4643-4646	CCG1248
C	4547,4548,4615,4618	CKSRYB105K10
C	4549,4550,4649,4650	ACH7304
C	4555,4655,4755	CKSYB475K25
C	4557,4657,4757,4857	CKSRYB222K50
C	4560,4660,4760,4860	CCSRCH102J50
C	4613,4617,4712,4713	ACH1479
C	4620,4630,4647,4648	CKSRYB105K10
C	4621,4629,4652,4653	CKSRYB104K16
C	4658,4721,4729,4752	CKSRYB104K16
C	4704,4705	ACG7069

Mark	No.	Description	Part No.
C	4706,4707		ACG7072
C	4715,4718,4720,4730		CKSRYB105K10
C	4716,4751,4912,4913		CKSRYB105K16
C	4717,4817		ACH1479
C	4722,4728		ACG7073
C	4731,4732		CKSQYB224K25
C	4735-4738		ACG7065
C	4741,4742,4927-4929		CCG1245
C	4743-4746		CCG1248
C	4747,4748,4818,4847		CKSRYB105K10
C	4749,4750		ACH7304
C	4753,4756,4758		CKSRYB104K16
C	4900-4905		ACH7305
C	4908		CEHAT221M25
C	4909,4924,4925		CKSRYB104K25
C	4914,4915		CKSQYB104K16
C	4920,4921		CKSQYB105K25
C	4930,4931		CCSRCH102J50

R ICE SHIELD ASSY

MISCELLANEOUS

KN	6990	SCREW PLATE	VNE1948
JH	6990	4P JUMPER CONNECTOR	52147-0410

S ZOUT ASSY

SEMICONDUCTORS

Q	6401,6411		IMX25

MISCELLANEOUS

JA	6401	PIN JACK(4P)	XKB3017
CN	6401	11P CONNECTOR	52044-1145

RESISTORS

		All Resistors	RS1/16S###J

CAPACITORS

C	6401,6402,6411,6412		CCSRCH471J50
C	6421,6423		CKSRYB103K50

T PRIMARY ASSY

SEMICONDUCTORS

⚠ IC	8711		NJM78M56FA
Q	8712		RT1N431M
D	8703,8704,8719		1SS352
⚠ D	8711		S1WB(A)60SD
D	8717		1SS357
D	8718		UDZS5R1(B)

MISCELLANEOUS

⚠ L	8701	LINE FILTER	XTF3004
H	8701,8702	FUSE CLIP	AKR7001
⚠ JA	8701	AC INLET ASSY	ADX7464
KN	8701	WRAPPING TERMINAL	VNF1084
KN	8702,8703	SCREW PLATE	VNE1948
⚠ RY	8702	POWER RELAY	ASR7022
⚠ T	8701	STANDBY TRANSFORMER	ATT7040
⚠ CN	8702	CONNECTOR(VH)	B3P5-VH
CN	8711	PLUG(5P)	KM200NA5

Mark	No.	Description	Part No.
JH	8701	PCB BINDER	VEF1040

RESISTORS

R	8702		RD1/4MUF220J
		Other Resistors	RS1/16S###J

CAPACITORS

⚠ C	8701,8702		ACE7013
⚠ C	8704		ACG7039
C	8711		CFTLA103J50
C	8712-8715,8720		CCSRCH102J50
C	8716		CEAT332M25
C	8717,8719		CKSRYB103K50
C	8718		CEAT221M25

U PRIMARY GUARD ASSY

MISCELLANEOUS

CN	5752	5P PLUG	XKP3062

V REG ASSY

SEMICONDUCTORS

⚠ IC	7501,7611		NJM78M12FA
⚠ IC	7502		NJM79M12FA
⚠ IC	7521		NJM78M06FA
⚠ IC	7601		NJM78M56FA
⚠ IC	7602		NJM79M05FA
⚠ D	7501-7504,7521,7522		1SR154-400
D	7505,7506,7523,7603		1SS357
⚠ D	7601		D3SBA20(B)
D	7602		1SS352
D	7604,7614		1SS357
⚠ D	7611,7612,7621-7623		1SR154-400
D	7613		1SR154-400
D	7624		HZU6R2(B2)
D	7625		PTZ24(B)

MISCELLANEOUS

H	7501-7504,7601-7604	FUSE CLIP	AKR7001
CN	7501,7601	5P TOP POST	B5B-EH
CN	7502	PLUG(5P)	KM200NA5R
CN	7602	PLUG(5P)	KM200NA5E
CN	7621	PLUG(6P)	KM200NA6
JH	7502,7601	PCB BINDER	VEF1040
⚠ P	7521,7522	PROTECTOR(1A)	AEK7009

RESISTORS

R	7621		RS1/16S473J
⚠		Other Resistors	RD1/4MUF###J

CAPACITORS

C	7500,7520,7600,7634		CFTLA394J50
C	7501		CEAT332M25
C	7502,7521		CEAT222M25
C	7505,7506,7522,7603		CKSRYB103K50
C	7507,7508		CEAT221M25
C	7523		CEAT221M16
C	7601		CEAT472M16
C	7602		CEAT222M16
C	7604,7613,7626		CKSRYB103K50
C	7605,7606,7624		CEAT101M16

Mark	No.	Description	Part No.
	C 7611		CEAT102M35
	C 7612		CEAT471M35
	C 7614		CEAT100M50
	C 7621		CEANP101M35
	C 7622		CEAT101M35
	C 7623		CEAT221M35
	C 7625		CEAT470M50
	C 7628,7632		CCSRCH102J50
	C 7629		CFTLA104J50

W ICE REG ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC 7251		NJM78M12FA
⚠	IC 7252		NJM79M12FA
⚠	IC 7271		NJM78M05FA
⚠	IC 7272		NJM79M05FA
⚠	Q 7201		RSQ035P03
⚠	Q 7202		RSQ035N03
	Q 7203,7204		RT1N431M
	Q 7205,7222		RT1P431M
⚠	Q 7211		2SD1763A
⚠	Q 7212		2SB1186A
	Q 7221		RT1N241M
	Q 7241		2SD1763A
	Q 7242		2SC4154
⚠	D 7201-7204,7211,7212		1SR154-400
	D 7205,7206,7245		1SS352
	D 7213,7214		HZU7R5(B1)
	D 7215,7216		1SR154-400
⚠	D 7241-7244,7251-7254		1SR154-400
	D 7247		UDZS12(B)
⚠	D 7248		PTZ15(B)
⚠	D 7249		HZU12(B2)
	D 7255,7256,7275,7276		1SS357
⚠	D 7271-7274		1SR154-400

MISCELLANEOUS

Mark	No.	Description	Part No.
	H 7201-7204,7241,7242	FUSE CLIP	AKR7001
	H 7251-7254	FUSE CLIP	AKR7001
	CN 7201	8P TOP POST	B8B-EH
	CN 7241	PLUG(2P)	KM200NA2
	CN 7251	PLUG(6P)	KM200NA6E
	CN 7271	PLUG(4P)	KM200NA4
	CN 7302	PLUG(6P)	KM200NA6R
	JH 7251-7253	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
	R 7211,7213		RD1/4MUF102J
	R 7241		RS1/4S152J
	R 7255,7256		RS1/10S0R0J
		Other Resistors	RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
	C 7200,7240,7250,7270		CFTLA394J50
	C 7201,7202		CEAT102M16
	C 7211-7215,7219,7245		CEAT100M50
	C 7217,7218,7242,7253		CKSRYB103K50
	C 7221,7246		CEAT470M25
	C 7241,7251,7252		CEAT222M25
	C 7254,7273,7274		CKSRYB103K50
	C 7255,7256		CEAT221M25
	C 7271,7272		CEAT222M16

Mark	No.	Description	Part No.
	C 7275,7276		CEAT221M16
	C 7277,7278		CCSRCH102J50

X B DIODE ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	D 7400,7401		LN6SB60-4003

MISCELLANEOUS

Mark	No.	Description	Part No.
	CN 7400	CONNECTOR	B3P-VH
	7400,7401	HEAT SINK B	ANH1021
	7402,7403	SCREW	IBZ30P080FCC
	JP 7401	3P HOUSING ASSY	ADX7649

RESISTORS

Mark	No.	Description	Part No.
	R 7402		RD1/4MUF100J
		Other Resistors	RS1/4SA###J

CAPACITORS

Mark	No.	Description	Part No.
	C 7400,7401		ACH7270
	C 7402,7403		CFTLA104J2A

Y B REG ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC 7300,7301		HA17431GLTPA
⚠	IC 7302,7303		NJM2746V
⚠	Q 7300		2SD2083(Y)
⚠	Q 7301		2SB1383(Y)
	Q 7302,7308		2SD1857
	Q 7303,7307		2SB1236
	Q 7304		RT1N241M
	Q 7306		RT1P241M
	Q 7309		2SC4154
	Q 7310		2SA1602A
	D 7302,7303		PTZ11(B)
	D 7304,7307		UDZS2R4(B)
	D 7306,7309,7350,7352		1SS352
	D 7308,7310		1SR154-400
	D 7351		UDZS18(B)
	D 7353		UDZS20(B)
	D 7355		1SS352
⚠	TH 7300		PTFM04BB222Q2N34B0

MISCELLANEOUS

Mark	No.	Description	Part No.
	H 7300-7303	FUSE CLIP	AKR7001
	CN 7303	4P-TOP POST(VH)	B4P-VH
	CN 7306	PLUG(4P)	KM200NA4
	CN 7308	CONNECTOR	B3P-VH
	JH 7300	PCB BINDER	VEF1040
⚠	P 7300,7301	PROTECTOR(500MA)	AEK7005

RESISTORS

Mark	No.	Description	Part No.
	R 7302,7303		RS2LMF222J
	R 7306,7307		RS2LMF472J
	R 7308-7311		RS1/4SA333J
	R 7312-7315		RN1/16SE2702D
	R 7318,7319		RS1/10S473J
	R 7322,7323		RS2LMF152J
	R 7324,7325		RS1/10S100J
	R 7326-7329		RS1LMF332J
	R 7332,7333		RN1/10SE8202D

Mark	No.	Description	Part No.
R	7334,7335		RN1/10SE6801D
R	7336,7337		RN1/10SE1800D
R	7386		RS1/4SA154J
R	7387		RS1/4SA393J
R	7388		RS1/4SA223J
R	7389		RS1/4SA473J
Other Resistors			RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
C	7302,7303,7376-7379		CCSRCH102J50
C	7304-7307,7350		CKSRYB104K50
C	7310,7311		CKSRYB473K50
C	7318,7319		CCG1248
C	7320,7321		CEAT4R7M50
C	7324,7325		CEHAT470M2A
C	7326,7327		ACG7064
C	7380-7384		CKSRYB104K50
C	7386		CCSRCH102J50

Z DCDC ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠ IC	3901		PQ1CG3032FZ
D	3901		RB050L-40
⚠ D	3902		PTZ6R8(B)

MISCELLANEOUS

Mark	No.	Description	Part No.
L	3901	INDUCTOR	ATH7052
CN	3901	CONNECTOR	B2B-EH-E
CN	3902	CONNRCTOR	B2B-EH-Y
	3900	HEAT SINK	ANH-309
	3901	SCREW	BBZ30P080FCC
JH	3901	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
R	3901		RN1/16SE1001D
R	3902		RN1/16SE3301D
Other Resistors			RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
C	3901		CEHAZL471M25
C	3902		CKSYB105K25
C	3903		CKSRYB104K25
C	3905		CEHAZL221M10
C	3906,3910		CCSRCH102J50
C	3911		CFTLA394J50

AA HDMI RECT ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠ D	8801		D5SBA20(B)

MISCELLANEOUS

Mark	No.	Description	Part No.
H	8801,8802	FUSE CLIP	AKR7001
CN	8801	3P TOP POST	B3B-EH
CN	8802	CONNECTOR	B2B-EH-R

CAPACITORS

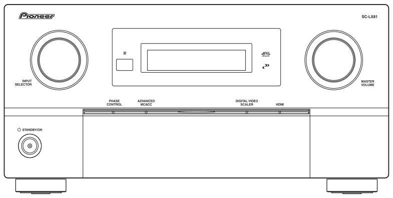
Mark	No.	Description	Part No.
C	8800		CFTLA274J50
C	8801		ACH7286
C	8803		CCSRCH102J50

Mark	No.	Description	Part No.

FM/AM TUNER UNIT

FM/AM TUNER UNIT has no service parts.

Service Manual



Pioneer
SC-LX81
INPUT SELECTOR
MASTER VOLUME
PHASE CONTROL
ADVANCED MCACC
DIGITAL VIDEO SCALER
HDMI
STANDBY/ON

SC-LX81

ORDER NO.
RRV3841

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

SC-LX81

SC-LX71

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
SC-LX81	HYSXJ5	AC 220 V to 230 V	
SC-LX71	HYSXJ5	AC 220 V to 230 V	

For details, refer to "Important Check Points for good servicing".

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

©**PIONEER CORPORATION 2008**

T-ZZV AUG. 2008 Printed in Japan

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

CONTENTS

1. SERVICE PRECAUTIONS 5
   1.1 NOTES ON SOLDERING 5
   1.2 NOTES ON REPLACING PARTS 5
   1.3 NOTES ON ASSEMBLING 6
2. SPECIFICATIONS 8
   2.1 ACCESSORIES 8
   2.2 SPECIFICATIONS 9
   2.3 PANEL FACILITIES 10
3. BASIC ITEMS FOR SERVICE 16
   3.1 CHECK POINTS AFTER SERVICING 16
   3.2 PCB LOCATIONS 17
   3.3 JIGS LIST 19
4. BLOCK DIAGRAM 20
   4.1 OVERALL WIRING DIAGRAM 20
   4.2 AUDIO BLOCK DIAGRAM 22
   4.3 DSP BLOCK DIAGRAM 24
   4.4 HDMI NETWORK BLOCK DIAGRAM 25
   4.5 MICROCOMPUTER BLOCK DIAGRAM 26
   4.6 POWER BLOCK DIAGRAM 28
5. DIAGNOSIS 30
   5.1 DIAGNOSIS FLOWCHART 30
   5.2 CIRCUIT DESCRIPTION 62
6. SERVICE MODE 70
   6.1 TEST MODE 70
7. DISASSEMBLY 75
8. EACH SETTING AND ADJUSTMENT 78
   8.1 HOW TO UPDATE FIRMWARE 78
9. EXPLODED VIEWS AND PARTS LIST 84
   9.1 PACKING SECTION 84
   9.2 EXTERIOR SECTION 86
   9.3 CHASSIS SECTION 88
   9.4 REAR PANEL SECTION 90
   9.5 FRONT PANEL SECTION 92
10. SCHEMATIC DIAGRAM 94
   10.1 AUDIO ASSY 94
   10.2 D-MOTHER ASSY (1/4) 96
   10.3 D-MOTHER ASSY (2/4) 98
   10.4 D-MOTHER ASSY (3/4) 100
   10.5 D-MOTHER ASSY (4/4) 102
   10.6 FRONT IN and V-BRIDGE ASSYS 104
   10.7 232C & CONTROL ASSY 106
   10.8 HDMI NETWORK ASSY (1/6) 108
   10.9 HDMI NETWORK ASSY (2/6) 110
   10.10 HDMI NETWORK ASSY (3/6) 112
   10.11 HDMI NETWORK ASSY (4/6) 114
   10.12 HDMI NETWORK ASSY (5/6) 116
   10.13 HDMI NETWORK ASSY (6/6) 118
   10.14 INTERFACE ASSY 120
   10.15 COMPONENT ASSY 122
   10.16 COMPOSITE S ASSY 124
   10.17 FRONT BRIDGE ASSY 126
   10.18 DISPLAY, VOL and POWER SW ASSYS 128
   10.19 PRE BRIDGE, ICE BUFFER, ICE SHIELD and PRIMARY GUARD ASSYS 130
   10.20 ICE INTERFACE and ZOUT ASSYS 132
   10.21 ICEPOWER AMP (1/5) 134
   10.22 ICEPOWER AMP (2/5) 136
   10.23 ICEPOWER AMP (3/5) 138
   10.24 ICEPOWER AMP (4/5) 140
   10.25 ICEPOWER AMP (5/5) 142
   10.26 PRIMARY ASSY 144
   10.27 REG ASSY 146
   10.28 ICE REG ASSY 148
   10.29 B REG ASSY 150
   10.30 B DIODE, DCDC, and HDMI RECT ASSYS 152
11. PCB CONNECTION DIAGRAM 153

11.1 AUDIO ASSY 154
11.2 D-MOTHER ASSY 158
11.3 FRONT IN ASSY 162
11.4 232C & CONTROL ASSY 163
11.5 HDMI NETWORK ASSY 164
11.6 INTERFACE ASSY 168
11.7 COMPONENT and V BRIDGE ASSYS 172
11.8 COMPOSITE S ASSY 176
11.9 FRONT BRIDGE ASSY 178
11.10 DISPLAY, POWER SW and VOL ASSYS 180
11.11 PRE BRIDGE, ICE BUFFER and ICE SHIELD ASSYS 184
11.12 ICE INTERFACE ASSY 186
11.13 ICEPOWER AMP ASSY 188
11.14 ZOUT, PRIMARY GUARD and REG ASSYS 192
11.15 PRIMARY ASSY 196
11.16 ICE REG ASSY 198
11.17 B DIODE and B REG ASSYS 200
11.18 DCDC and HDMI RECT ASSYS 202
12. ELECTRICAL PARTS LIST 203

1. SERVICE PRECAUTIONS

1.1 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
  Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.

- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 °C.
  Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 °C in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Do NOT use a soldering iron whose tip temperature cannot be controlled.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:
- Parts numbers of lead-free solder:
  GYP1006 1.0 in dia.
  GYP1007 0.6 in dia.
  GYP1008 0.3 in dia.

1.2 NOTES ON REPLACING PARTS

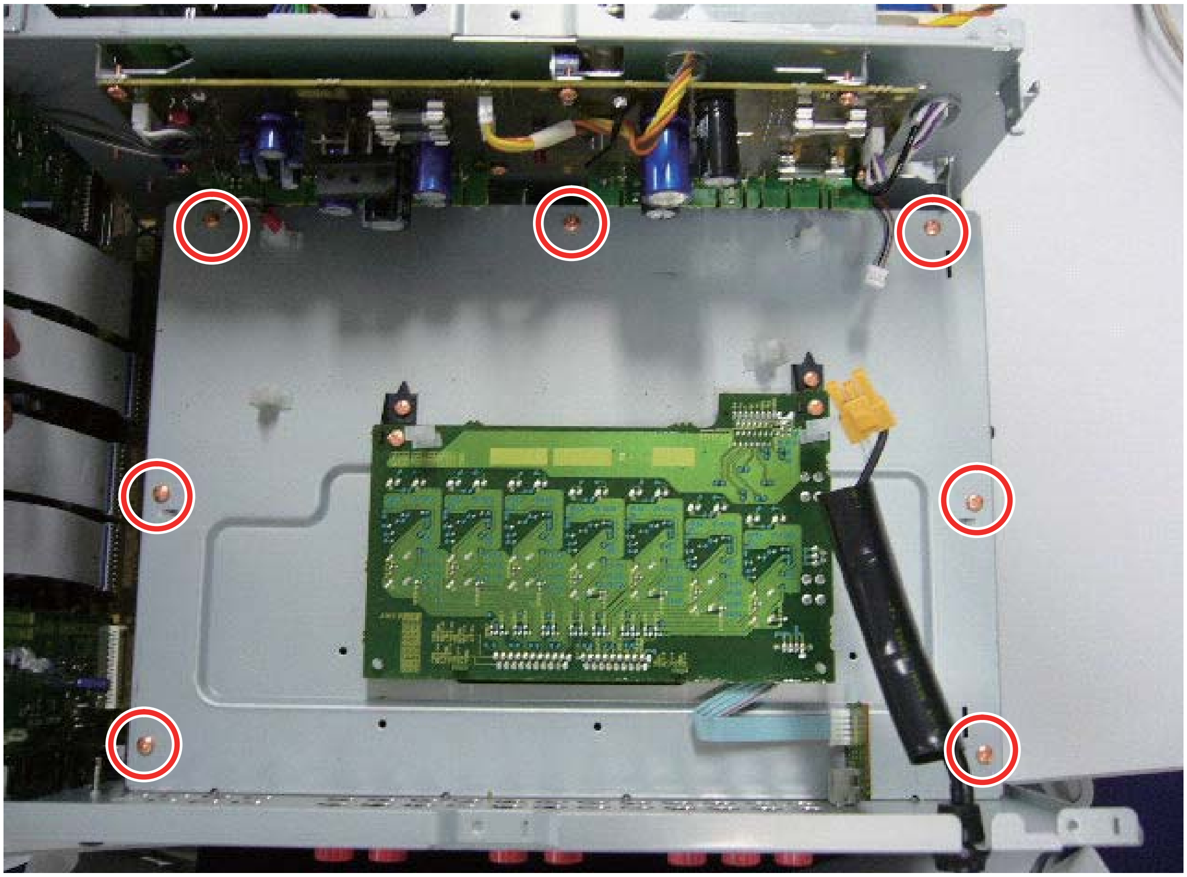
The part listed below is difficult to replace as a discrete component part.
When the part listed in the table is defective, replace whole Assy.

ASSY NAME	PCB ASSY Part No.	Parts that is Difficult to Replace			
		Ref No.	FUNCTION	Part No.	Remarks
HDMI NETWORK ASSY	SC-LX81: AWX9234 SC-LX71: AWX9235	IC101	HDMI Receiver	SII9135CTU	IC with heat-pad
		IC701	MEDIA Processor	DM850E	IC with heat-pad
		IC791	iPod Co-Processor	341S2154	IC with heat-pad

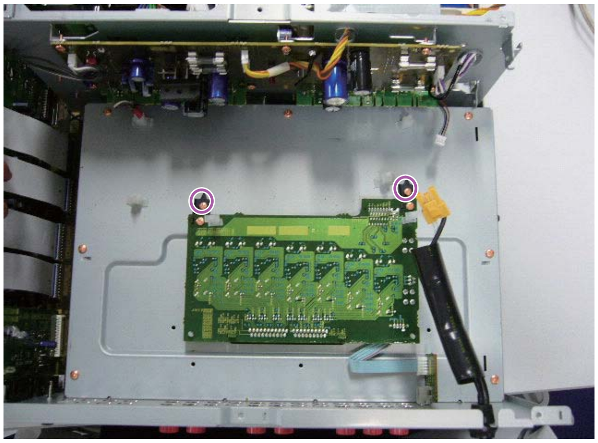
1.3 NOTES ON ASSEMBLING

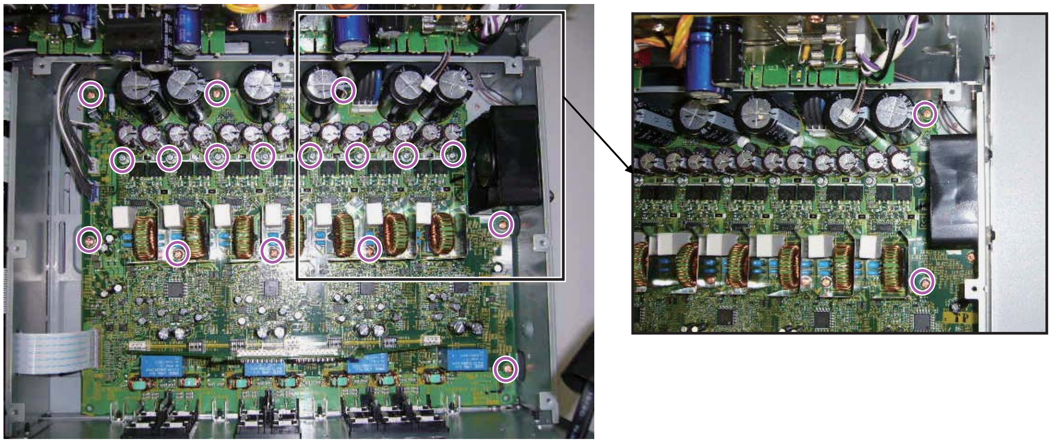
When assembling the ICE amplifier block, please note the following points of screws to prevent from short circuit.

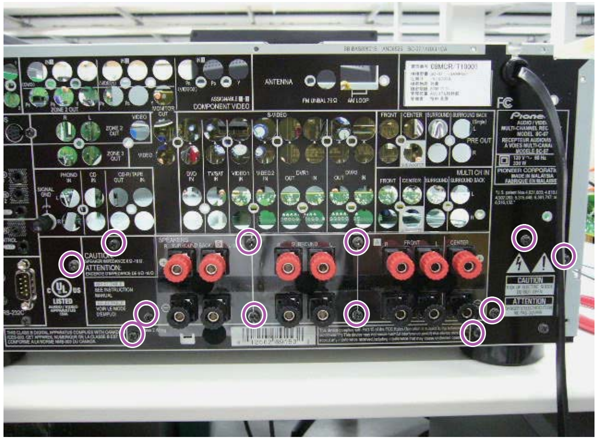
The following 7 points of screws must always be used AMZ30P060FTC



Points to be watched for swarf



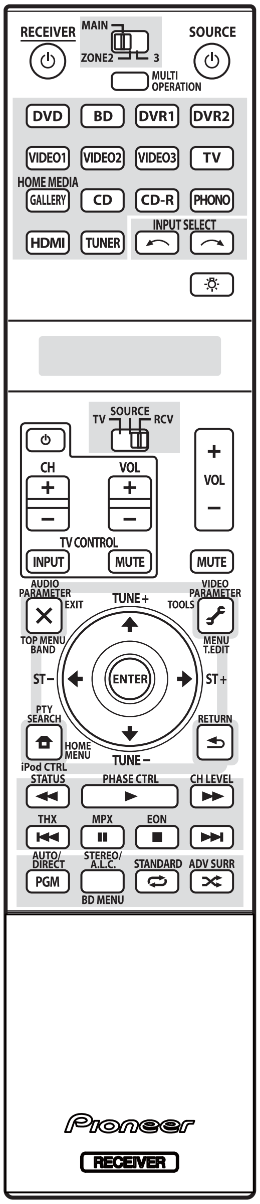




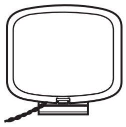
If a screw at any of these points needs to be removed for service,
be sure to check that the swarf is not on the screw before refastening.

2. SPECIFICATIONS

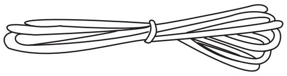
2.1 ACCESSORIES


RECEIVER
MAIN
ZONE2
3
SOURCE
MULTI OPERATION
DVD
BD
DVR1
DVR2
VIDEO1
VIDEO2
VIDEO3
TV
HOME MEDIA GALLERY
CD
CD-R
PHONO
HDMI
TUNER
INPUT SELECT
SOURCE
TV
RCV
CH
VOL
VOL
TV CONTROL
INPUT
MUTE
MUTE
AUDIO PARAMETER
EXIT
TUNE +
TOOLS
VIDEO PARAMETER
TOP MENU BAND
MENU T.EDIT
ST –
ENTER
ST +
PTY SEARCH
RETURN
HOME MENU
TUNE –
iPod CTRL
STATUS
PHASE CTRL
CH LEVEL
THX
MPX
EON
AUTO/ DIRECT
STEREO/ A.L.C.
STANDARD
ADV SURR
PGM
BD MENU
Pioneer
RECEIVER

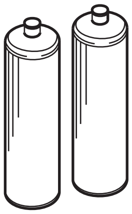
Remote Control Unit
(AXD7521)



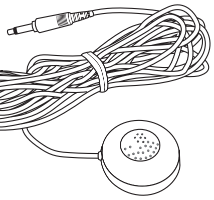
AM Loop Antenna
(ATB7013)



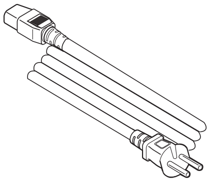
FM Wire Antenna
(ADH7030)



AA/IEC R6P
Dry Cell Batteries



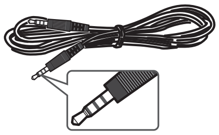
Setup Microphone
(for Auto MCACC setup)
(APM7008)



Power Cord
(ADG7062)

- Caution Sheet SP
- Warranty Card
- Operating Instructions

SERVICE PARTS



SR+ mini-plug cable
(ADE7095)

2.2 SPECIFICATIONS

Specifications

Amplifier Section

Multi channel simultaneous power output (1 kHz, 1 %, 8 Ω)

7ch total	700 W (LX81), 630 W(LX71)

Continuous Power Output (Multichannel)
(DIN 1 kHz, THD 1 %, 6 Ω)

Front	190 W + 190 W (LX81), 180 W + 180 W (LX71)
Center	190 W (LX81), 180 W (LX71)
Surround	190 W + 190 W (LX81) 180 W + 180 W (LX71)
Surround back	190 W + 190 W (LX81) 180 W + 180 W (LX71)

(DIN 1 kHz, THD 1 %, 8 Ω)

Front	160 W + 160 W (LX81), 150 W + 150 W (LX71)
Center	160 W (LX81), 150 W (LX71)
Surround	160 W + 160 W (LX81) 150 W + 150 W (LX71)
Surround back	160 W + 160 W (LX81) 150 W + 150 W (LX71)

Total harmonic distortion	0.05 % (20 Hz to 20 kHz, 130 W, 8 Ω)
Rated Power Output – Stereo (20 Hz to 20 kHz, 0.09 %, 8 Ω)	140 W+140 W

- The above specifications are applicable when the power supply is 230 V.

Audio Section

Input (Sensitivity/Impedance)

PHONO MM	4.2 mV/47 kΩ
LINE	335 mV/47 kΩ
Frequency Response (LINE)	5 Hz to 100 000 Hz dB

Output (Level/Impedance)

REC	335 mV/2.2 kΩ

Signal-to-Noise Ratio (IHF, short circuited, A network)

LINE	103 dB

Signal-to-Noise Ratio
[DIN (continuous rated power output/50 mW)]

LINE	92 dB/65 dB

Composite Video / S-Video Section

Input (Sensitivity/Impedance)	1 Vp-p/75 Ω
Output (Level/Impedance)	1 Vp-p/75 Ω
Signal-to-Noise Ratio	65 dB
Frequency Response	5 Hz to 10 MHz

Component Video Section

Input (Sensitivity/Impedance)	1 Vp-p/75 Ω
Output (Level/Impedance)	1 Vp-p/75 Ω
Signal-to-Noise Ratio	65 dB
Frequency Response	5 Hz to 100 MHz

- Specifications and the design are subject to possible modifications without notice, due to improvements.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", "Surround EX" and the double-D symbol are trademarks of Dolby Laboratories.

HDMI Section

Input	19-pin
Output	19-pin (5 V, 100 mA)

Network Section

LAN terminal	10 BASE-T/100 BASE-TX

USB Section

USB terminal	USB2.0 Full Speed

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Antenna Input	75 Ω unbalanced

AM Tuner Section

Frequency Range	531 kHz to 1602 kHz (9 kHz step)
Antenna	Loop antenna

Miscellaneous

Power Requirements	AC 220 V to 230 V, 50 Hz/60 Hz
Power Consumption	330 W
In standby	0.5 W (HDMI Control OFF) 0.7 W (HDMI Control ON)
Dimensions	420 (W) mm x 200 (H) mm x 459.5 (D) mm
Weight (without package)	18.5 kg

Furnished Parts

Setup microphone (for Auto MCACC Setup)	1
AA/IEC R6P dry cell batteries	2
Remote control unit	1
AM loop antenna	1
FM wire antenna	1
Power cord	1
Warranty card	1
Operating instructions	

Note

- Specifications and the design are subject to possible modifications without notice, due to improvements.

Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,226,616; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS is a registered trademark and the DTS logos, Symbol, DTS-HD and DTS-HD Master Audio are trademarks of DTS, Inc. © 1996-2007 DTS, Inc. All Rights Reserved.

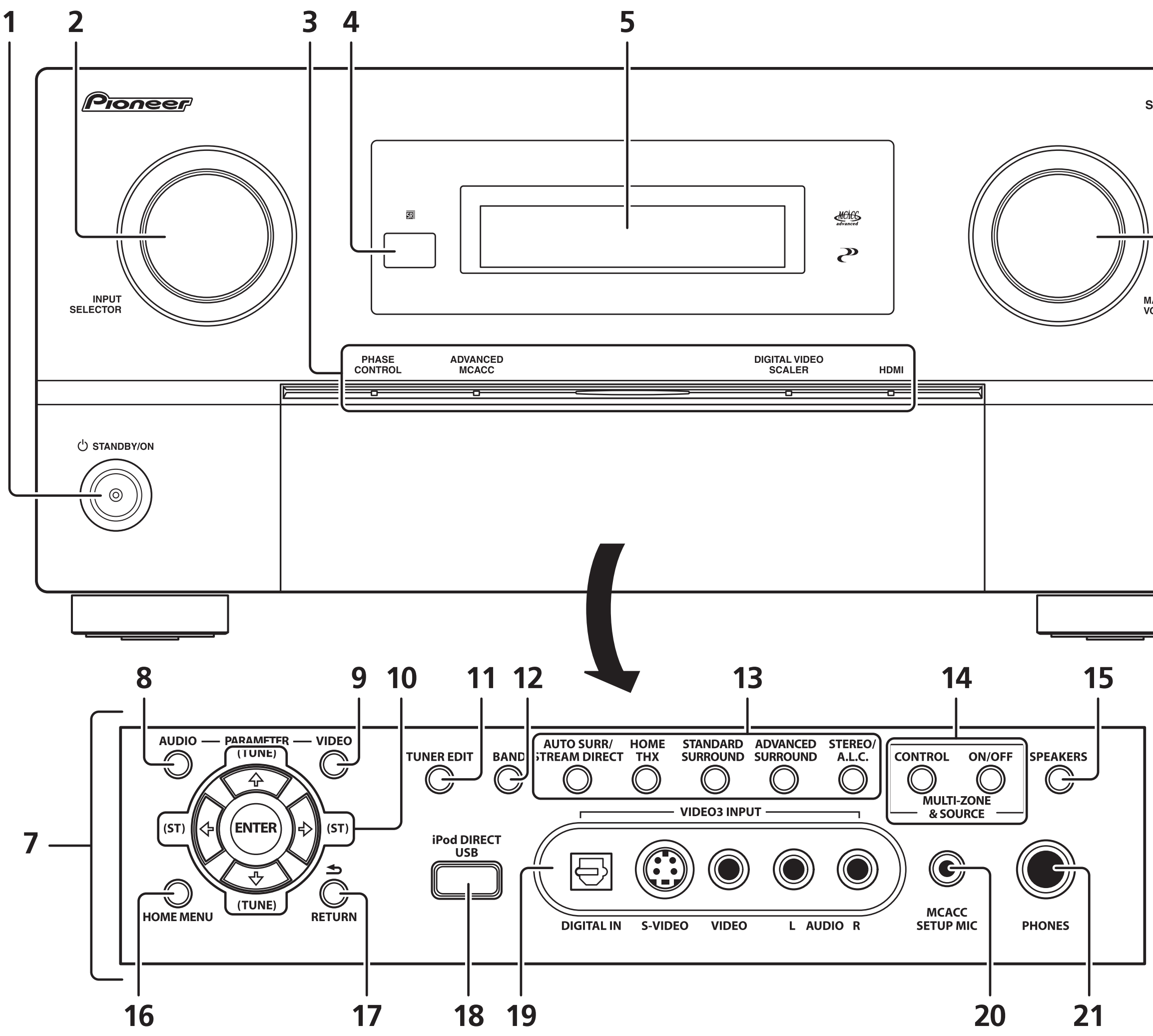
Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

THX, the THX logo, Ultra2 Plus and Select2 Plus are trademarks of THX Ltd. which may be registered in some jurisdictions. All rights reserved. All other trademarks are the property of their respective owners.

"Neural Surround", "Neural Audio", "Neural" and "NRL" are trademarks and logos owned by Neural Audio Corporation, THX is a trademark of THX Ltd., which may be registered in some jurisdictions. All rights reserved.

2.3 PANEL FACILITIES

[1] Front Panel


1
2
3
4
5
6
Pioneer
SC-LX81
INPUT SELECTOR
MASTER VOLUME
PHASE CONTROL
ADVANCED MCACC
DIGITAL VIDEO SCALER
HDMI
STANDBY/ON
7
8
9
10
11
12
13
14
15
AUDIO
PARAMETER
VIDEO
(TUNE)
(ST)
ENTER
(ST)
(TUNE)
HOME MENU
RETURN
TUNER EDIT
BAND
AUTO SURR/ STREAM DIRECT
HOME THX
STANDARD SURROUND
ADVANCED SURROUND
STEREO/ A.L.C.
CONTROL
ON/OFF
MULTI-ZONE & SOURCE
SPEAKERS
VIDEO3 INPUT
iPod DIRECT USB
DIGITAL IN
S-VIDEO
VIDEO
L AUDIO R
MCACC SETUP MIC
PHONES
16
17
18
19
20
21

1 ⏻ STANDBY/ON

Switches the receiver between on and standby. Power indicator lights when the receiver is on.

2 INPUT SELECTOR dial

Use to select an input source.

3 PHASE CONTROL indicator – Lights to indicate Phase Control or Full Band Phase Control is selected.

ADVANCED MCACC indicator – Lights when one of the Selecting MCACC presets is selected.

DIGITAL VIDEO SCALER indicator – Lights when Resolution is set to a setting other than **PURE** (for example, when the video input signal is upscaled).

HDMI indicator – Blinks when connecting an HDMI-equipped component; lights when the component is connected.

4 Remote sensor

Receives the signals from the remote control.

5 Character display

6 MASTER VOLUME dial

7 Front panel controls

To access the front panel controls, push gently on the lower third portion of the panel with your finger.

8 AUDIO PARAMETER

Use to access the Audio options.

9 VIDEO PARAMETER

Use to access the Video options.

10 ⬆/⬇/⬅/➡ (TUNE/ST) /ENTER

Use the arrow buttons when setting up your **HOME MENU**. Use **TUNE ⬆/⬇** to find radio frequencies and use **ST ⬅/➡** to find preset stations.

11 TUNER EDIT

Use with **⬆/⬇/⬅/➡/ENTER** to memorize and name stations for recall.

12 BAND

Switches between AM and FM radio bands.

13 Listening mode buttons

AUTO SURR/STREAM DIRECT – Press to select Auto Surround or Stream Direct listening.

HOME THX – Press to select a Home THX listening mode.

STANDARD SURROUND – Press for Standard decoding and to switch between the various DD Pro Logic IIx and Neo:6 options.

ADVANCED SURROUND – Use to switch between the various surround modes.

STEREO/A.L.C. – Switches between stereo playback, Auto level control stereo mode and Front Stage Surround Advance modes.

14 MULTI-ZONE & SOURCE controls

If you've made MULTI-ZONE connections use these controls to control the sub zone from the main zone.

15 SPEAKERS

Use to change the speaker system.

16 HOME MENU

Press to access the **HOME MENU**.

17 RETURN

Press to confirm and exit the current menu screen.

18 iPod DIRECT USB terminal

Use to connect your Apple iPod as an audio source, or connect a USB audio device for playback.

19 VIDEO 3 INPUT

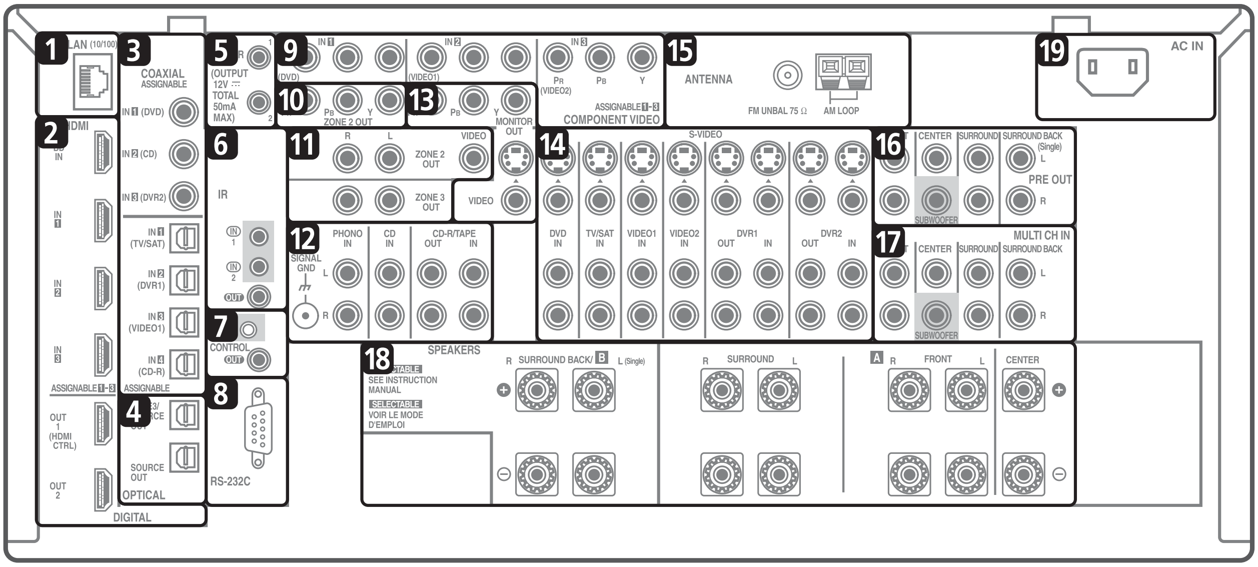
20 MCACC SETUP MIC jack

Use to connect the supplied microphone.

21 PHONES jack

Use to connect headphones. When the headphones are connected, there is no sound output from the speakers.

[2] Rear Panel


1
LAN (10/100)
2
HDMI
IN 1
IN 2
IN 3
ASSIGNABLE 1-3
OUT 1 (HDMI CTRL)
OUT 2
3
COAXIAL ASSIGNABLE
IN 1 (DVD)
IN 2 (CD)
IN 3 (DVR2)
IN 1 (TV/SAT)
IN 2 (DVR1)
IN 3 (VIDEO1)
IN 4 (CD-R)
ASSIGNABLE
4
SOURCE OUT
OPTICAL
DIGITAL
5
(OUTPUT 12V TOTAL 50mA MAX)
6
IR
IN 1
IN 2
OUT
7
CONTROL
OUT
8
RS-232C
9
IN 1 (DVD)
IN 2 (VIDEO1)
IN 3 (VIDEO2)
PR PB Y
ASSIGNABLE 1-3
COMPONENT VIDEO
10
ZONE 2 OUT
11
R L
ZONE 2 OUT
ZONE 3 OUT
VIDEO
12
SIGNAL GND
PHONO IN
CD IN
CD-R/TAPE OUT IN
13
MONITOR OUT
14
S-VIDEO
DVD IN
TV/SAT IN
VIDEO1 IN
VIDEO2 IN
DVR1 OUT IN
DVR2 OUT IN
15
ANTENNA
FM UNBAL 75 Ω
AM LOOP
16
CENTER
SURROUND
SURROUND BACK (Single)
PRE OUT
SUBWOOFER
17
MULTI CH IN
CENTER
SURROUND
SURROUND BACK
SUBWOOFER
18
SPEAKERS
SEE INSTRUCTION MANUAL
VOIR LE MODE D'EMPLOI
SURROUND BACK/ B
L (Single)
SURROUND
A
FRONT
CENTER
19
AC IN

Caution

- Before making or changing the connections, switch off the power and disconnect the power cord from the power outlet. Plugging in should be the final step.

1 LAN (10/100) terminal

2 HDMI connectors (x6 (SC-LX81), x5 (SC-LX71))

Multiple inputs and one (SC-LX71) or two (SC-LX81) outputs for high-quality audio/video connection to compatible HDMI devices.

3 Optical and coaxial digital audio inputs (x7 (SC-LX81), x6 (SC-LX71))

Use for digital audio sources, including DVD players/recorders, digital satellite receivers, CD players, etc.

4 Optical digital audio outputs (x2)

Use for recording to a CD or MiniDisc recorder. **ZONE3/SOURCE OUT** jack is also used for MULTI-ZONE connections.

5 12 V trigger jacks (total 50 mA max.) (x2)

Use to switch components in your system on and off according to the input function of the receiver.

6 Remote inputs/output

Use for connection to an external remote control sensor for use in a MULTI-ZONE setup, for example.

7 Control input/output

Use to connect other Pioneer components so that you can control all your equipment from a single IR remote sensor.

8 RS-232C connector

Use for connection to a PC for graphical output when using Advanced MCACC or Full Band Phase Control.

9 Component video inputs (x3)

Use the inputs to connect any video source that has component video output, such as a DVD player.

10 SC-LX81 only: ZONE 2 component video output

Use to connect monitors or TVs in a separate room.

11 MULTI-ZONE audio/video outputs

Use to connect a second or third amplifier and monitors or TVs in a separate room.

12 Stereo analog audio source inputs/(outputs) (x4)

Use for connection to audio sources such as CD players, tape decks, turntables, etc.

13 Composite, S-Video and Component monitor outputs

Use to connect monitors and TVs.

14 Audio/video source inputs/(outputs) (x8)

Use for connection to audio/visual sources, such as DVD players/recorders, VCRs, etc. Each set of inputs has jacks for composite video, S-Video and stereo analog audio.

15 AM and FM antenna terminals

Use to connect indoor or outdoor antennas for radio broadcasts.

16 Multichannel pre-amplifier outputs

Use to connect separate amplifiers for front, center, surround, surround back and subwoofer channels.

17 Multichannel analog audio inputs

7.1 channel inputs for connection to a DVD player with multichannel analog outputs.

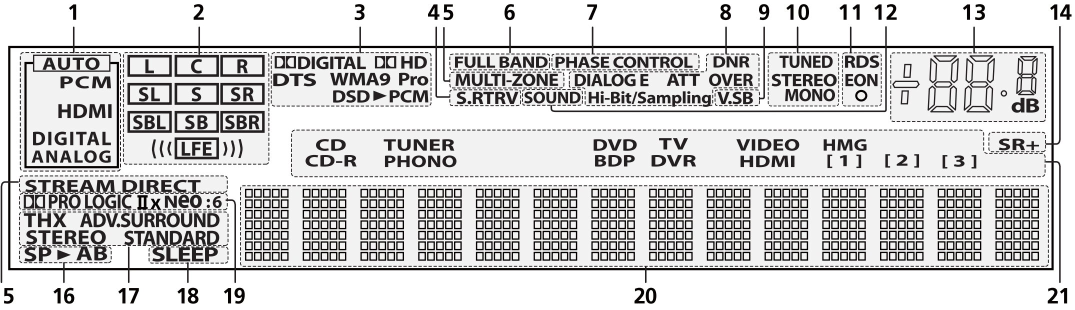
18 Speaker terminals

Use for connection to the main front, center, surround and surround back speakers.

19 AC power inlet

Connect the supplied power cord here.

[3] Display


1
2
3
4
5
6
7
8
9
10
11
12
13
14
AUTO
PCM
HDMI
DIGITAL
ANALOG
L C R
SL S SR
SBL SB SBR
(((LFE)))
DD DIGITAL DD HD
DTS WMA9 Pro
DSD ► PCM
FULL BAND
PHASE CONTROL
DNR
MULTI-ZONE
DIALOG E
ATT
OVER
S.RTRV
SOUND
Hi-Bit/Sampling
V.SB
TUNED
STEREO
MONO
RDS
EON
dB
CD
CD-R
TUNER
PHONO
DVD
BDP
TV
DVR
VIDEO
HDMI
HMG
[1]
[2]
[3]
SR+
STREAM DIRECT
DD PRO LOGIC IIx Neo:6
THX
ADV.SURROUND
STEREO
STANDARD
SP ► AB
SLEEP
15
16
17
18
19
20
21

1 SIGNAL indicators

Light to indicate the currently selected input signal.

AUTO lights when the receiver is set to select the input signal automatically.

2 Program format indicators

These change according to which channels are active in digital sources.

L – Left front channel

C – Center channel

R – Right front channel

SL – Left surround channel

S – Surround channel (mono)

SR – Right surround channel

SBL – Left surround back channel

SB – Surround back channel (mono)

SBR – Right surround back channel

LFE – Low frequency effects channel (the **((( )))** indicators light when an LFE signal is being input)

3 Digital format indicators

Light when a signal encoded in the corresponding format is detected (**DSD ► PCM** lights during DSD (Digital Stream Direct) to PCM conversion with SACDs).

4 S.RTRV

Lights when the Sound Retriever is switched on.

5 MULTI-ZONE

Lights when the MULTI-ZONE feature is active.

6 FULL BAND

Lights when the Full Band Phase Control is switched on.

7 PHASE CONTROL

Lights when the Phase Control or Full Band Phase Control is switched on.

8 Sound processing indicators

Light according to the active Audio parameter(s) and/or **ANALOG ATT**.

9 V.SB

Lights during Virtual surround back processing.

10 TUNER indicators

TUNED – Lights when a broadcast is being received.

STEREO – Lights when a stereo FM broadcast is being received in auto stereo mode.

MONO – Lights when the mono mode is set using **MPX**.

11 EON/RDS indicators

EON – Lights when the EON mode is set (flashes during EON reception). The ○ indicator lights when the current station carries the EON service.

RDS – Lights when an RDS broadcast is received.

12 SOUND

Lights when any of the Midnight, Loudness or tone controls feature is selected.

13 Master volume level

Shows the overall volume level. **–80dB** indicates the minimum level, and **+12dB** indicates the maximum level.

14 SR+

Lights when the SR+ mode is switched on.

15 STREAM DIRECT

Lights when Direct/Pure Direct is selected.

16 Speaker indicators

Lights to indicate the current speaker system, **A** and/or **B**.

17 Listening mode indicators

THX – Lights when one of the Home THX modes is selected.

ADV.SURROUND – Lights when one of the Advanced Surround modes has been selected.

STEREO – Lights when stereo listening is switched on.

STANDARD – Lights when one of the Standard Surround modes is switched on.

18 SLEEP

Lights when the receiver is in sleep mode.

19 Matrix decoding format indicators

DD PRO LOGIC IIx – This lights to indicate DD Pro Logic II / DD Pro Logic IIx decoding.

Neo:6 – When one of the Neo:6 modes of the receiver is on, this lights to indicate Neo:6 processing.

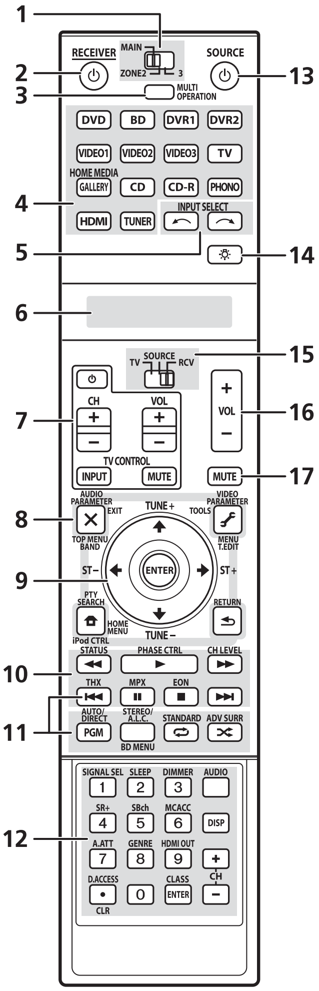
20 Character display

Displays various system information.

21 Input source indicators

Light to indicate the input source you have selected.

[4] Remote Control


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
RECEIVER
MAIN
ZONE2
3
SOURCE
MULTI OPERATION
DVD
BD
DVR1
DVR2
VIDEO1
VIDEO2
VIDEO3
TV
HOME MEDIA GALLERY
CD
CD-R
PHONO
HDMI
TUNER
INPUT SELECT
SOURCE
TV
RCV
CH
VOL
TV CONTROL
INPUT
MUTE
VOL
MUTE
AUDIO PARAMETER
EXIT
TUNE +
TOOLS
VIDEO PARAMETER
TOP MENU BAND
MENU T.EDIT
ST–
ENTER
ST+
PTY SEARCH
HOME MENU
RETURN
TUNE –
iPod CTRL
STATUS
PHASE CTRL
CH LEVEL
THX
MPX
EON
AUTO/ DIRECT
STEREO/ A.L.C.
STANDARD
ADV SURR
PGM
BD MENU
SIGNAL SEL
SLEEP
DIMMER
AUDIO
SR+
SBch
MCACC
DISP
A.ATT
GENRE
HDMI OUT
CH
D.ACCESS
CLASS
ENTER
CLR

The remote has been conveniently color-coded according to component control using the following system:

- **White** – Receiver control, TV Control
- **Blue** – Other controls

1 MULTI-ZONE operation selector switch

Switch to perform operations in the main zone, zone 2 and zone 3.

2 RECEIVER ⏻

This switches between standby and on for this receiver.

3 MULTI OPERATION

Use this button to perform multi operations.

4 Input source buttons

Press to select control of other components.

5 INPUT SELECT

Use to select the input source.

6 Character display (LCD)

This display shows information when transmitting control signals.
The following commands are shown when you're setting the remote to control other components:

SETUP – Indicates the setup mode, from which you choose the options below.

PRESET –

LEARNING –

MULTI OP –

SYS OFF –

DIRECT F –

RENAME –

ERASE –

RESET –

READ ID –

7 TV CONTROL buttons

These buttons are dedicated to control the TV assigned to **TV** operation selector switch. Thus if you only have one TV to hook up to this system assign it to the **TV** operation selector switch.

⏻ – Use to turn on/off the power of the TV.

VOL +/– – Use to adjust the volume on your TV.

INPUT – Use to select the TV input signal.

CH +/– – Use to select channels.

MUTE – Use to mute the sound or cancel the mute mode.

8 Tuner/component control buttons/HOME MENU

These button controls can be accessed after you have selected the corresponding input source button (**DVD**, **DVR 1**, **TV**, etc.).
Set the operation selector switch to **RCV** to access the following controls:

AUDIO PARAMETER – Use to access the Audio options.

VIDEO PARAMETER – Use to access the Video options.

HOME MENU – Use to access the **HOME MENU**

RETURN – Press to confirm and exit the current menu screen (also use to return to the previous menu with DVDs or to select closed captioning with DTV).

9 ⬆/⬇/⬅/➡ (TUNE +/–/ST +/–) /ENTER

Use the arrow buttons when setting up your surround sound system and the Audio or Video options. Also used to control DVD menus/ options and for deck 1 of a double cassette deck player. Use **TUNE +/–** (⬆/⬇) to find radio frequencies and use **ST +/–** (⬅/➡) to find preset stations.

10 Component control buttons

The main buttons (►, ■, etc.) are used to control a component after you have selected it using the input source buttons.
The controls above these buttons can be accessed after you have selected the corresponding input source button (for example **DVD**, **DVR 1** or **TV**). These buttons also function as described below.

Press **TUNER** first to access:

MPX – Switches between stereo and mono reception of FM broadcasts. If the signal is weak, then switching to mono will improve the sound quality. NOISE CUT MODE 1 to 2 can be selected when receiving AM broadcasts.

EON – Use to search for programs that are broadcasting traffic or news information.

Set the operation selector switch to **RCV** first to access:

STATUS – Press to check selected receiver settings.

PHASE CTRL – Press to switch on/off Phase Control or Full Band Phase Control.

CH LEVEL – Press repeatedly to select a channel, then use ⬅/➡ to adjust the level.

11 Receiver controls

AUTO/DIRECT – Press to select Auto Surround or Stream Direct listening.

STEREO/A.L.C. – Switches between the stereo playback mode and the Front Stage Surround Advance mode.

STANDARD – Press for Standard decoding and to switch between the various ꟿ Pro Logic IIx and Neo:6 options.

ADV SURR – Use to switch between the various surround modes.

THX – Press to select a Home THX listening mode.

12 Number buttons and other receiver/component controls

Use the number buttons to directly select a radio frequency or the tracks on a CD, DVD, etc.

ENTER can be used to enter commands for TV or DTV.

After set the remote control operation switch to **RCV**:

SIGNAL SEL – Use to select an input signal.

SLEEP – Use to put the receiver in sleep mode and select the amount of time before sleep.

DIMMER – Dims or brightens the display.

SR+ – Switches the SR+ mode on/off.

SBch – Use to select the surround/virtual surround back channel mode.

MCACC – Press to switch between MCACC presets.

A.ATT – Attenuates (lowers) the level of an analog input signal to prevent distortion.

GENRE – Automatically selects the most appropriate Advanced Surround mode for the genre of the source currently being played back (this feature is available only when a Pioneer DVD recorder supporting HDMI Control is connected to this receiver via HDMI).

SC-LX81 only: **HDMI OUT** – Switch the HDMI output terminal.

Press **TUNER** first to access:

D.ACCESS – After pressing, you can access a radio station directly using the number buttons.

CLASS – Switches between the three banks (classes) of radio station presets.

13 SOURCE ⏻

Press to turn on/off other components connected to the receiver.

14 Remote control illumination button

Press to turn on/off the illumination of some of the buttons and the LCD light.

15 Remote control operation selector switch

Set to **RCV** to operate the receiver, **TV** or **SOURCE** to operate the TV or the source device.

When this switch is set to **RCV**, the receiver can be controlled (used to select the white commands above the number buttons (**A.ATT**, etc.)). Also use this switch to set up surround sound.

16 VOL +/–

Use to set the listening volume.

17 MUTE

Mutes the sound or restores the sound if it has been muted (adjusting the volume also restores the sound).

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

To keep the product quality after servicing, confirm recommended check points shown below.

No.	Procedures	Item to be checked
1	Confirm whether the customer complain has been solved. If the customer complain occurs with the particular source, such as Dolby Digital, DTS, AAC, DVD-A and HDMI, input it for the operation check.	The customer complain must not be reappeared. Video, Audio and operations must be normal.
2	Check the analog audio playback. (Make the analog connections with a DVD player.)	Each channel audio and operations must be normal.
3	Check the digital audio playback. (Make the digital connections with a DVD player.)	Each channel audio and operations must be normal.
4	Check surround playback. (Select Surround mode and check the multichannel operations via the DSP circuit.)	Each channel audio and operations must be normal.
5	Check the video outputs. (Connect with a DVD player.)	Video and operations must be normal.
6	Check the sound from headphone output.	Sound must be normal, without noise.
7	Check the appearance of the product.	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding video and audio:

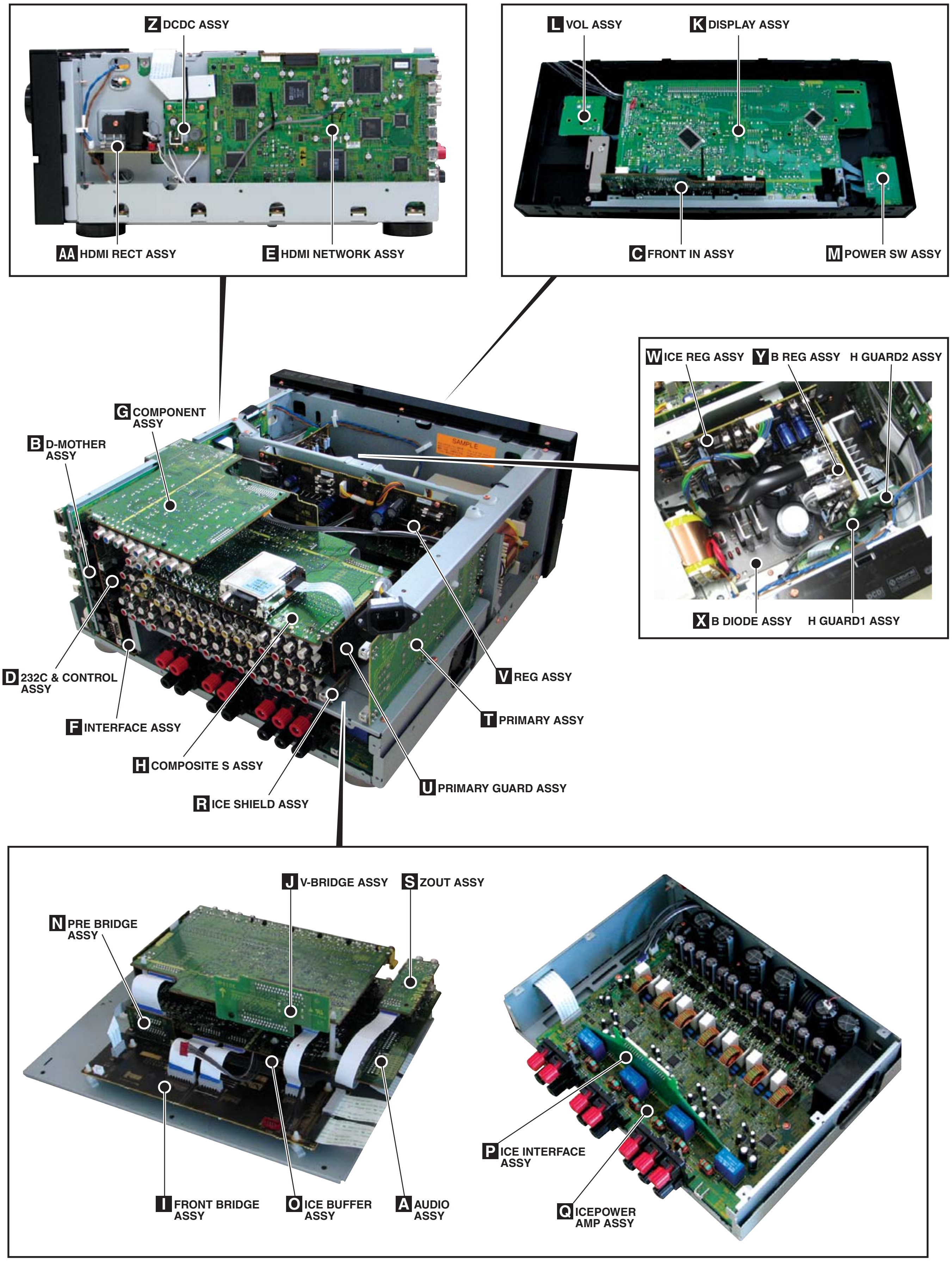
Items to be checked regarding video	Item to be checked regarding audio
Block noise	Distortion
Horizontal noise	Noise
Dot noise	Volume too low
Disturbed image (video jumpiness)	Volume too high
Too dark	Volume fluctuating
Too bright	Sound interrupted
Mottled color	

● Cleaning the Fan

Before shipment, be sure to clean the fan, using the following cleaning materials:

Cleaning paper : GED-008

3.2 PCB LOCATIONS


Z DCDC ASSY
AA HDMI RECT ASSY
E HDMI NETWORK ASSY
L VOL ASSY
K DISPLAY ASSY
C FRONT IN ASSY
M POWER SW ASSY
W ICE REG ASSY
Y B REG ASSY
H GUARD2 ASSY
X B DIODE ASSY
H GUARD1 ASSY
G COMPONENT ASSY
B D-MOTHER ASSY
D 232C & CONTROL ASSY
F INTERFACE ASSY
H COMPOSITE S ASSY
R ICE SHIELD ASSY
V REG ASSY
T PRIMARY ASSY
U PRIMARY GUARD ASSY
J V-BRIDGE ASSY
S ZOUT ASSY
N PRE BRIDGE ASSY
I FRONT BRIDGE ASSY
O ICE BUFFER ASSY
A AUDIO ASSY
P ICE INTERFACE ASSY
Q ICEPOWER AMP ASSY

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
● The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

◆ LIST OF ASSEMBLIES

Mark	Symbol and Description	SC-LX81 /HYSXJ5	SC-LX71 /HYSXJ5
	1..ICEPOWER AMP ASSY	AWH7017	AWH7017
NSP	1..COMPOSITE ICE ASSY	AWM8106	AWM8106
	2..COMPOSITE S ASSY	AWX9144	AWX9144
	2..ICE BUFFER ASSY	AWX9145	AWX9145
	2..PRE BRIDGE ASSY	AWX9146	AWX9146
	2..ICE SHIELD ASSY	AWX9173	AWX9173
NSP	1..PRIM DISPLAY ASSY	AWM8120	AWM8129
	2..PRIMARY ASSY	AWX9166	AWX9166
	2..HDMI RECT ASSY	AWX9156	AWX9156
	2..DISPLAY ASSY	AWX9158	AWX9238
	2..VOL ASSY	AWX9159	AWX9159
	2..POWER SW ASSY	AWX9160	AWX9160
	2..V-BRIDGE ASSY	AWX9161	AWX9161
NSP	1..DIGITAL MOTHER ASSY	AWP7058	AWP7064
	2..D-MOTHER ASSY	AWX9196	AWX9202
	2..ICE INTERFACE ASSY	AWX9137	AWX9137
	2..DCDC ASSY	AWX9138	AWX9138
	2..H GUARD2 ASSY	AWX9147	AWX9147
	2..H GUARD1 ASSY	AWX9174	AWX9174
NSP	1..COMPONENT FIN ASSY	AWQ7058	AWQ7061
	2..COMPONENT ASSY	AWX9141	AWX9211
	2..FRONT IN ASSY	AWX9142	AWX9142
	2..ZOUT ASSY	AWX9143	AWX9143
NSP	1..INTERFACE REG ASSY	AWR7067	AWR7067
	2..INTERFACE ASSY	AWX9148	AWX9148
	2..ICE REG ASSY	AWX9149	AWX9149
	2..B REG ASSY	AWX9150	AWX9150
	2..B DIODE ASSY	AWX9171	AWX9171
NSP	1..FBRIDGE REG ASSY	AWR7068	AWR7068
	2..REG ASSY	AWX9152	AWX9152
	2..FRONT BRIDGE ASSY	AWX9155	AWX9155
NSP	1..AUDIO ASSY	AWR7071	AWR7071
	2..AUDIO ASSY	AWX9206	AWX9206
	2..232C & CONTROL ASSY	AWX9209	AWX9209
	2..PRIMARY GUARD ASSY	AWX9172	AWX9172
	1..HDMI NETWORK ASSY	AWX9234	AWX9235
	1..FM/AM TUNER UNIT	AXX7248	AXX7248

3.3 JIGS LIST

[1] Jigs List

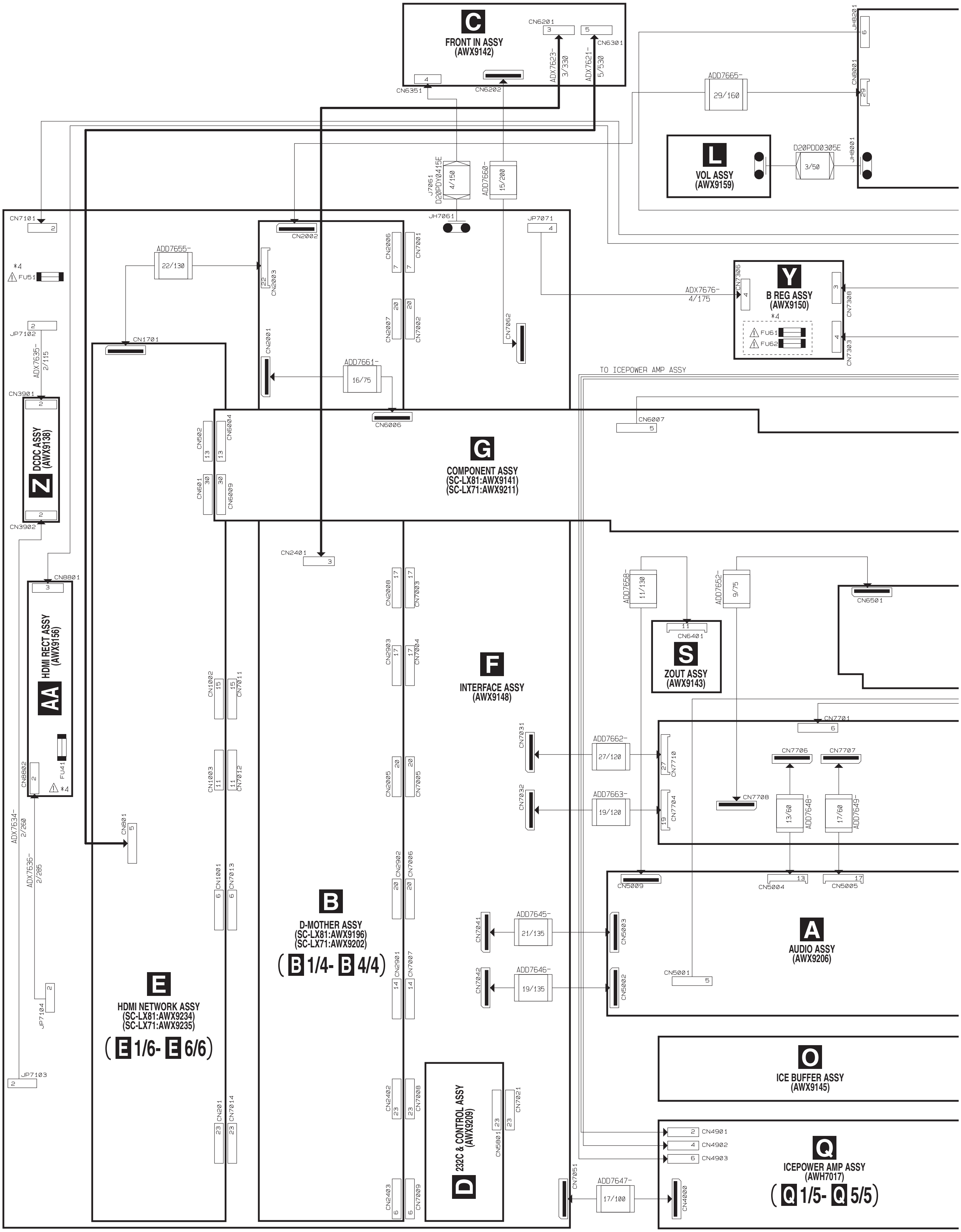
Name	Jig No.	Remarks
27P FFC	GGD1588	Diagnosis
19P FFC	GGD1589	Diagnosis
21P FFC	GGD1590	Diagnosis
16P FFC	GGD1591	Diagnosis
30p+13p board to board extension cable	GGD1592	Diagnosis
17p+19p board to board extension cable	GGD1593	Diagnosis
5p extension cable	GGD1594	Diagnosis

[2] Lubricants and Glues List

Name	Lubricants and Glues No.	Remarks
Lubicating Oil	GYA1001	Refer to “9.5 FRONT PANEL SECTION”
Silicone Grease	GEM1057	Refer to “9.3 CHASSIS SECTION”

4. BLOCK DIAGRAM

4.1 OVERALL WIRING DIAGRAM


C
FRONT IN ASSY
(AWX9142)
CN6201
CN6301
CN6351
CN6202
ADX7623-
3/330
ADX7621-
5/530
JH8201
CN8001
ADD7665-
29/160
L
VOL ASSY
(AWX9159)
D20PDD0305E
3/50
JH8001
J7061
D20PDY0415E
4/150
ADD7660-
15/200
JH7061
CN7101
*4
FU51
ADD7655-
22/130
CN2002
CN2003
CN2006
CN7001
CN2007
CN7002
CN2001
ADD7661-
16/75
JP7071
CN7062
ADX7676-
4/175
Y
B REG ASSY
(AWX9150)
CN7306
CN7308
CN7303
FU61
FU62
TO ICEPOWER AMP ASSY
JP7102
ADX7635-
2/115
CN3901
Z
DCDC ASSY
(AWX9138)
CN3902
CN1701
CN502
CN6004
CN601
CN6009
CN6006
G
COMPONENT ASSY
(SC-LX81:AWX9141)
(SC-LX71:AWX9211)
CN6007
CN2401
CN8801
AA
HDMI RECT ASSY
(AWX9156)
FU41
CN8802
CN2008
CN7003
CN2903
CN7004
F
INTERFACE ASSY
(AWX9148)
ADD7658-
11/130
ADD7652-
9/75
CN6401
S
ZOUT ASSY
(AWX9143)
CN6501
CN1002
CN7011
CN1003
CN7012
CN2005
CN7005
CN7031
ADD7662-
27/120
CN7710
CN7701
CN7706
CN7707
CN7032
ADD7663-
19/120
CN7704
CN7708
13/60
ADD7648-
17/60
ADD7649-
ADX7634-
2/260
ADX7636-
2/285
CN801
CN1001
CN7013
CN2902
CN7006
CN5009
CN5004
CN5005
B
D-MOTHER ASSY
(SC-LX81:AWX9196)
(SC-LX71:AWX9202)
(B 1/4- B 4/4)
CN7041
ADD7645-
21/135
CN5003
A
AUDIO ASSY
(AWX9206)
CN5001
CN2901
CN7007
CN7042
ADD7646-
19/135
CN5002
JP7104
E
HDMI NETWORK ASSY
(SC-LX81:AWX9234)
(SC-LX71:AWX9235)
(E 1/6- E 6/6)
O
ICE BUFFER ASSY
(AWX9145)
JP7103
CN2402
CN7008
D
232C & CONTROL ASSY
(AWX9209)
CN5801
CN7021
CN201
CN7014
CN4901
CN4902
CN4903
Q
ICEPOWER AMP ASSY
(AWH7017)
(Q 1/5- Q 5/5)
CN2403
CN7009
CN7051
ADD7647-
17/100
CN4000

CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

*4 ⚠

	FU1	FU2	FU11, FU12	FU13, FU14	FU15	FU21, FU22	FU31, FU32	FU41	FU51	FU61, FU62
HYS	REK1029- (T5A L/250V)	–	REK1022- (T1A L/250V)	REK1021- (T800mA L/250V)	REK1022- (T1A L/250V)	REK1021- (T800mA L/250V)	REK1021- (T800mA L/250V)	REK1027- (T3.15A L/250V)	REK1024- (T1.6A L/250V)	REK1154- (10A/125V)

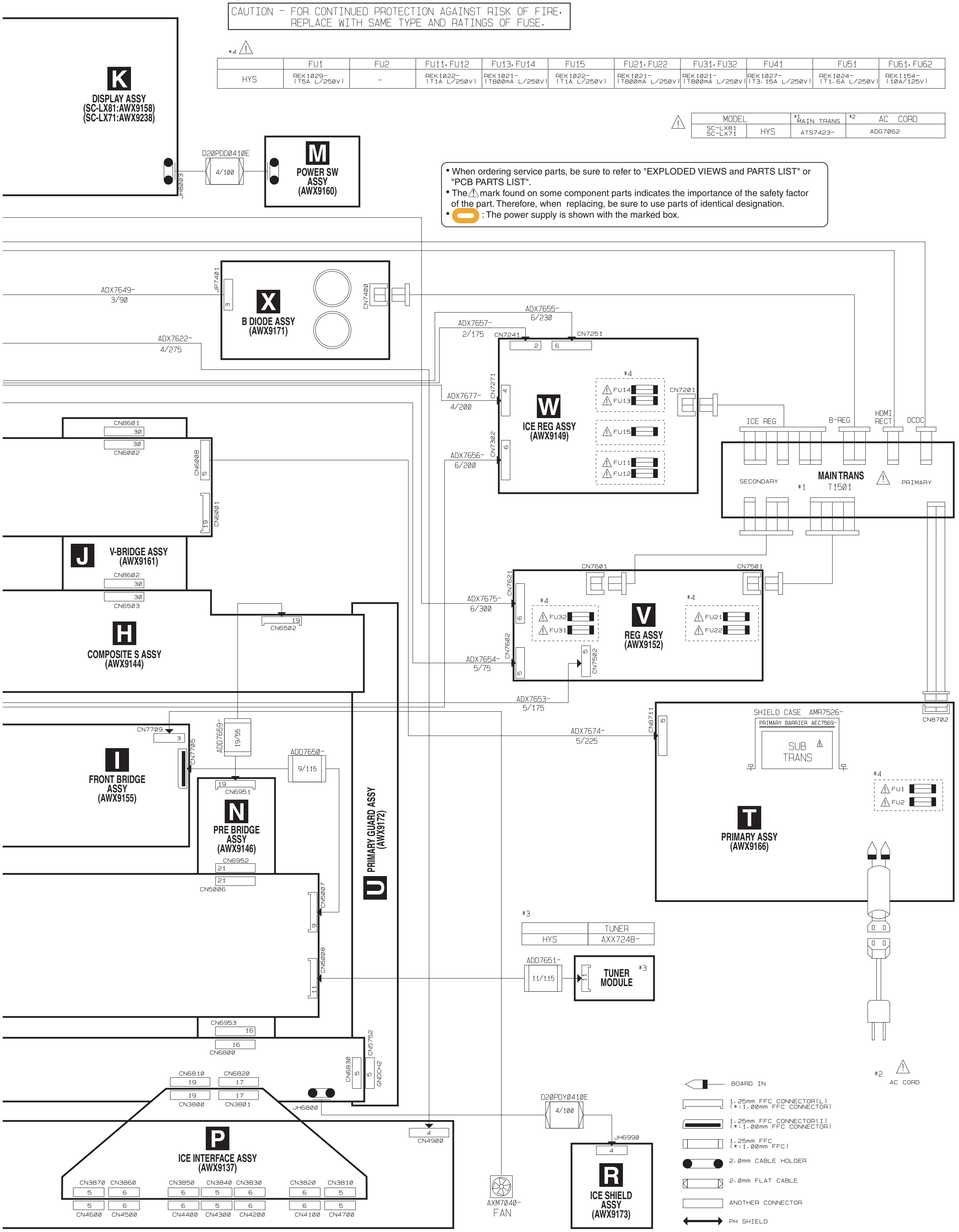
⚠

MODEL		*1 MAIN TRANS	*2 AC CORD
SC-LX81 SC-LX71	HYS	ATS7423-	ADG7062

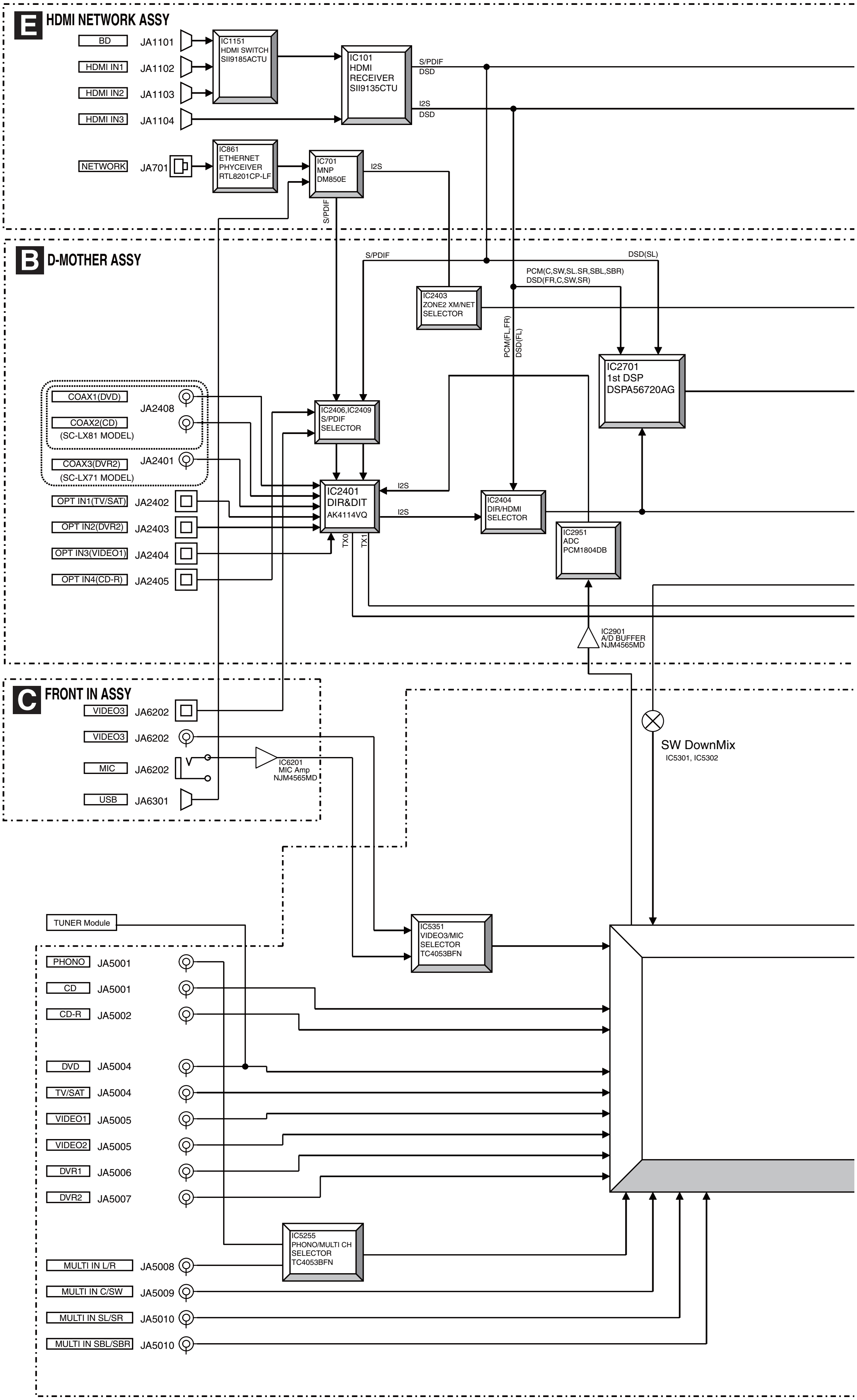
- When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- ▭ : The power supply is shown with the marked box.

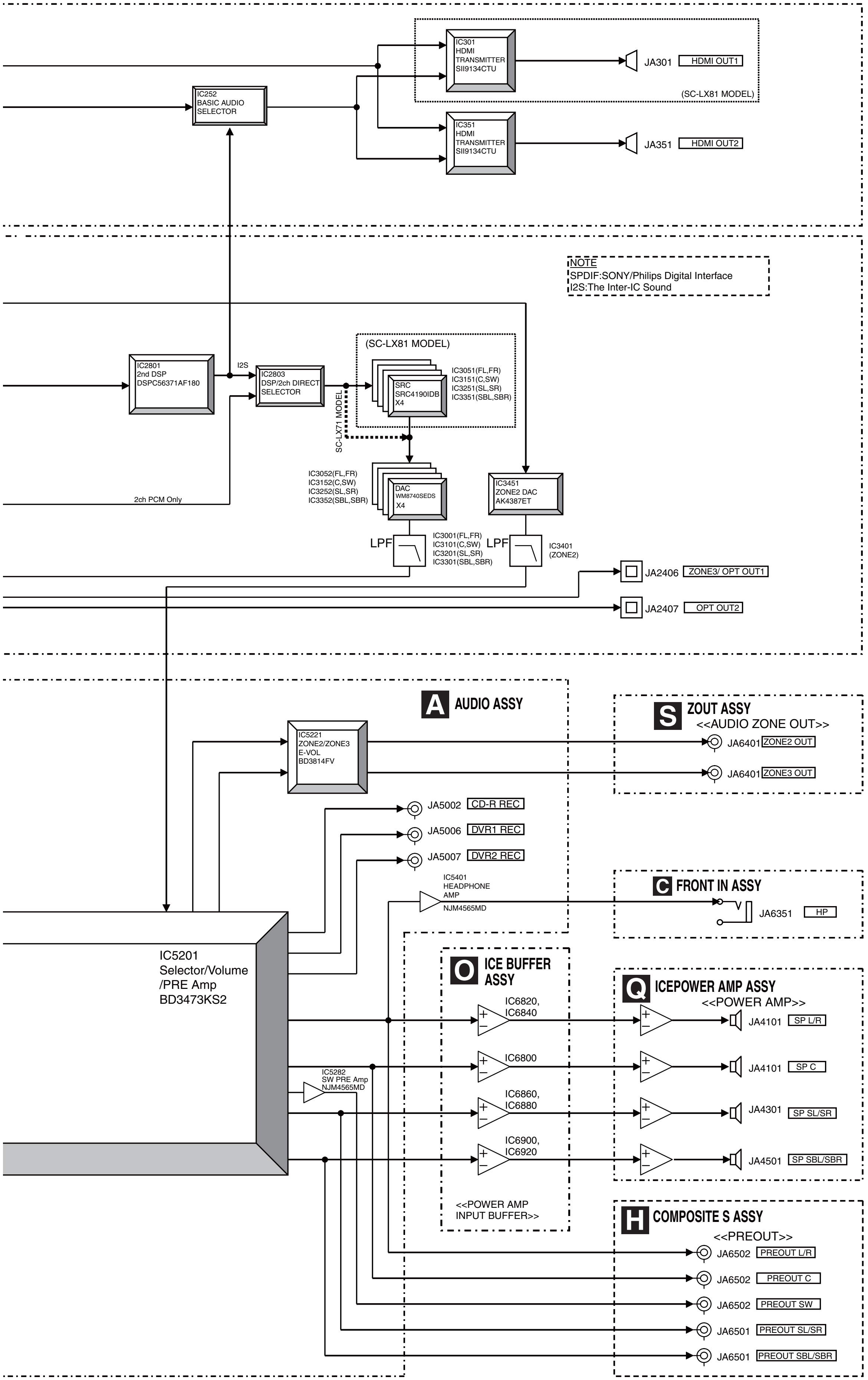
*3

	TUNER
HYS	AXX7248-

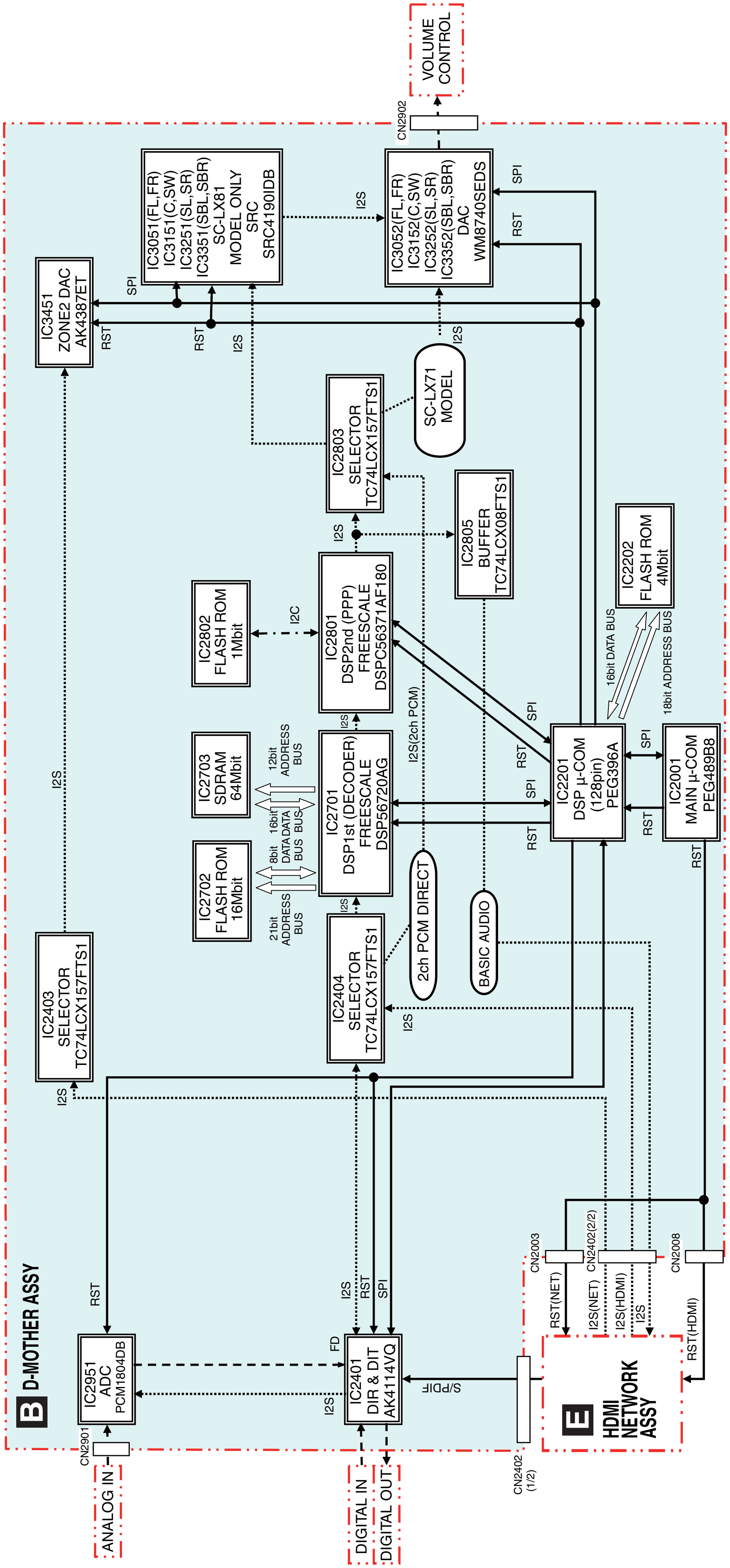

K
DISPLAY ASSY
(SC-LX81:AWX9158)
(SC-LX71:AWX9238)
JH8003
D20PDD0410E
4/100
M
POWER SW ASSY
(AWX9160)
ADX7649-
3/90
JP7401
3
X
B DIODE ASSY
(AWX9171)
CN7400
ADX7622-
4/275
ADX7655-
6/230
ADX7657-
2/175
CN7241
2
CN7251
6
CN7271
4
ADX7677-
4/200
W
ICE REG ASSY
(AWX9149)
*4
FU14
FU13
FU15
FU11
FU12
CN7201
CN7302
6
ADX7656-
6/200
ICE REG
B-REG
HDMI RECT
DCDC
SECONDARY
MAIN TRANS
*1
T1501
PRIMARY
CN8601
30
CN6002
CN6008
5
CN6001
19
J
V-BRIDGE ASSY
(AWX9161)
CN8602
30
CN6503
H
COMPOSITE S ASSY
(AWX9144)
19
CN6502
CN7601
CN7501
CN7621
6
ADX7675-
6/300
FU32
FU31
V
REG ASSY
(AWX9152)
FU21
FU22
CN7602
5
ADX7654-
5/75
CN7502
ADX7653-
5/175
CN7709
3
CN7705
I
FRONT BRIDGE ASSY
(AWX9155)
ADD7659-
19/55
ADD7650-
9/115
19
CN6951
N
PRE BRIDGE ASSY
(AWX9146)
CN6952
21
CN5006
CN5007
9
CN5008
11
U
PRIMARY GUARD ASSY
(AWX9172)
ADX7674-
5/225
CN8711
SHIELD CASE AMR7526-
PRIMARY BARRIER AEC7569-
SUB TRANS
CN8702
FU1
FU2
T
PRIMARY ASSY
(AWX9166)
ADD7651-
11/115
TUNER MODULE
*3
CN6953
16
CN6800
CN6830
5
CN5752
GNDCH2
CN6810
19
CN6820
17
CN3800
CN3801
JH6800
D20PDY0410E
4/100
JH6990
4
CN4900
P
ICE INTERFACE ASSY
(AWX9137)
CN3870
CN3860
CN3850
CN3840
CN3830
CN3820
CN3810
CN4600
CN4500
CN4400
CN4300
CN4200
CN4100
CN4700
AXM7040-
FAN
R
ICE SHIELD ASSY
(AWX9173)
*2
AC CORD
BOARD IN
1.25mm FFC CONNECTOR(L) (*:1.00mm FFC CONNECTOR)
1.25mm FFC CONNECTOR(I) (*:1.00mm FFC CONNECTOR)
1.25mm FFC (*:1.00mm FFC)
2.0mm CABLE HOLDER
2.0mm FLAT CABLE
ANOTHER CONNECTOR
PH SHIELD

4.2 AUDIO BLOCK DIAGRAM

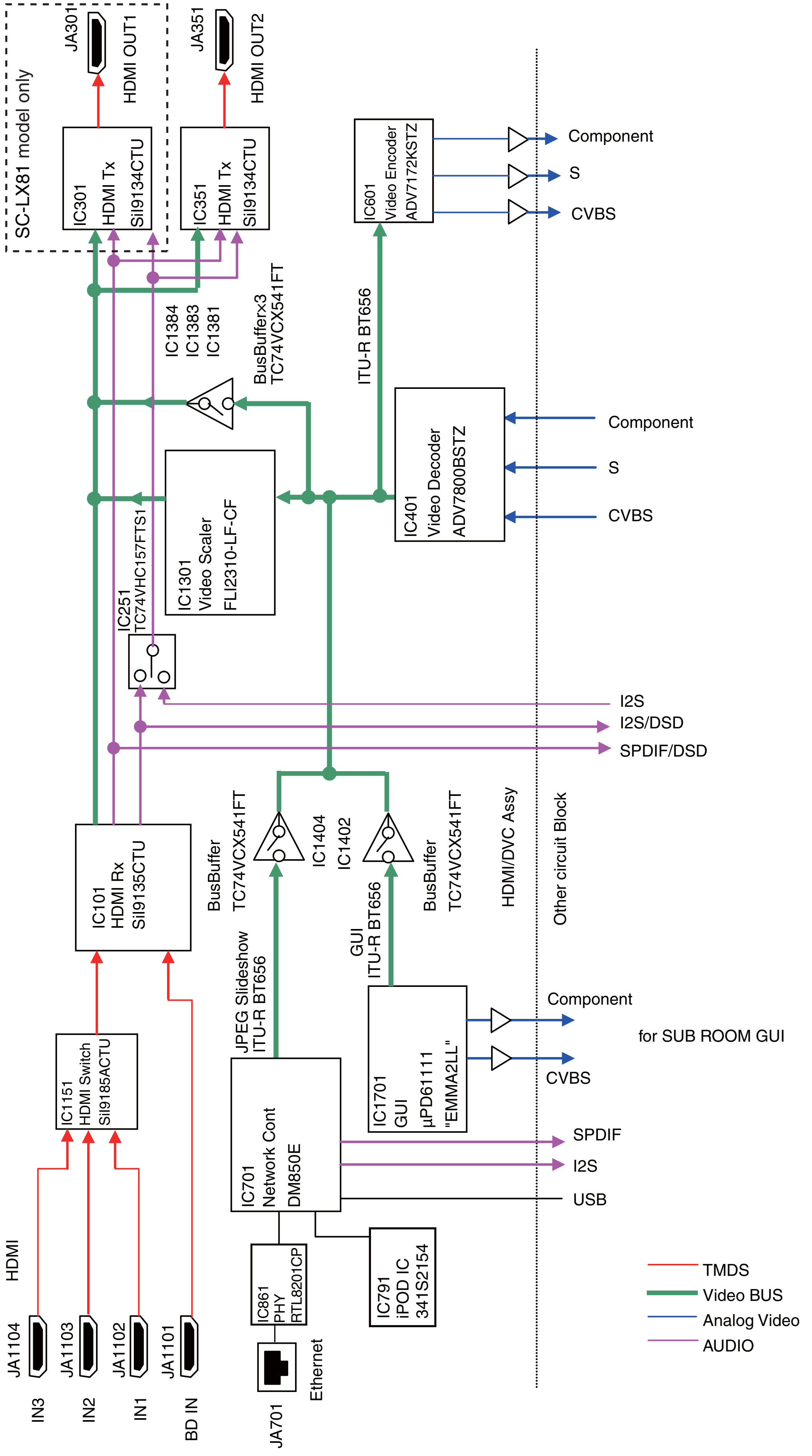

E HDMI NETWORK ASSY
BD
JA1101
HDMI IN1
JA1102
HDMI IN2
JA1103
HDMI IN3
JA1104
IC1151 HDMI SWITCH SII9185ACTU
IC101 HDMI RECEIVER SII9135CTU
S/PDIF DSD
I2S DSD
NETWORK
JA701
IC861 ETHERNET PHYCEIVER RTL8201CP-LF
IC701 MNP DM850E
I2S
S/PDIF
B D-MOTHER ASSY
S/PDIF
DSD(SL)
PCM(C,SW,SL.SR,SBL,SBR) DSD(FR,C,SW,SR)
IC2403 ZONE2 XM/NET SELECTOR
PCM(FL,FR) DSD(FL)
IC2701 1st DSP DSPA56720AG
COAX1(DVD)
JA2408
COAX2(CD)
(SC-LX81 MODEL)
IC2406,IC2409 S/PDIF SELECTOR
COAX3(DVR2)
JA2401
(SC-LX71 MODEL)
OPT IN1(TV/SAT)
JA2402
OPT IN2(DVR2)
JA2403
OPT IN3(VIDEO1)
JA2404
OPT IN4(CD-R)
JA2405
IC2401 DIR&DIT AK4114VQ
I2S
I2S
TX0
TX1
IC2404 DIR/HDMI SELECTOR
IC2951 ADC PCM1804DB
IC2901 A/D BUFFER NJM4565MD
C FRONT IN ASSY
VIDEO3
JA6202
VIDEO3
JA6202
MIC
JA6202
IC6201 MIC Amp NJM4565MD
USB
JA6301
SW DownMix
IC5301, IC5302
TUNER Module
IC5351 VIDEO3/MIC SELECTOR TC4053BFN
PHONO
JA5001
CD
JA5001
CD-R
JA5002
DVD
JA5004
TV/SAT
JA5004
VIDEO1
JA5005
VIDEO2
JA5005
DVR1
JA5006
DVR2
JA5007
IC5255 PHONO/MULTI CH SELECTOR TC4053BFN
MULTI IN L/R
JA5008
MULTI IN C/SW
JA5009
MULTI IN SL/SR
JA5010
MULTI IN SBL/SBR
JA5010


IC301
HDMI
TRANSMITTER
SII9134CTU
JA301
HDMI OUT1
(SC-LX81 MODEL)
IC252
BASIC AUDIO
SELECTOR
IC351
HDMI
TRANSMITTER
SII9134CTU
JA351
HDMI OUT2
NOTE
SPDIF:SONY/Philips Digital Interface
I2S:The Inter-IC Sound
(SC-LX81 MODEL)
IC2801
2nd DSP
DSPC56371AF180
I2S
IC2803
DSP/2ch DIRECT
SELECTOR
SRC
SRC4190IDB
X4
IC3051(FL,FR)
IC3151(C,SW)
IC3251(SL,SR)
IC3351(SBL,SBR)
SC-LX71 MODEL
IC3052(FL,FR)
IC3152(C,SW)
IC3252(SL,SR)
IC3352(SBL,SBR)
DAC
WM8740SEDS
X4
IC3451
ZONE2 DAC
AK4387ET
2ch PCM Only
LPF
IC3001(FL,FR)
IC3101(C,SW)
IC3201(SL,SR)
IC3301(SBL,SBR)
LPF
IC3401
(ZONE2)
JA2406
ZONE3/ OPT OUT1
JA2407
OPT OUT2
A
AUDIO ASSY
IC5221
ZONE2/ZONE3
E-VOL
BD3814FV
S
ZOUT ASSY
<<AUDIO ZONE OUT>>
JA6401
ZONE2 OUT
JA6401
ZONE3 OUT
JA5002
CD-R REC
JA5006
DVR1 REC
JA5007
DVR2 REC
IC5401
HEADPHONE
AMP
NJM4565MD
C
FRONT IN ASSY
JA6351
HP
IC5201
Selector/Volume
/PRE Amp
BD3473KS2
O
ICE BUFFER
ASSY
IC6820,
IC6840
IC6800
IC6860,
IC6880
IC6900,
IC6920
<<POWER AMP
INPUT BUFFER>>
IC5282
SW PRE Amp
NJM4565MD
Q
ICEPOWER AMP ASSY
<<POWER AMP>>
JA4101
SP L/R
JA4101
SP C
JA4301
SP SL/SR
JA4501
SP SBL/SBR
H
COMPOSITE S ASSY
<<PREOUT>>
JA6502
PREOUT L/R
JA6502
PREOUT C
JA6502
PREOUT SW
JA6501
PREOUT SL/SR
JA6501
PREOUT SBL/SBR

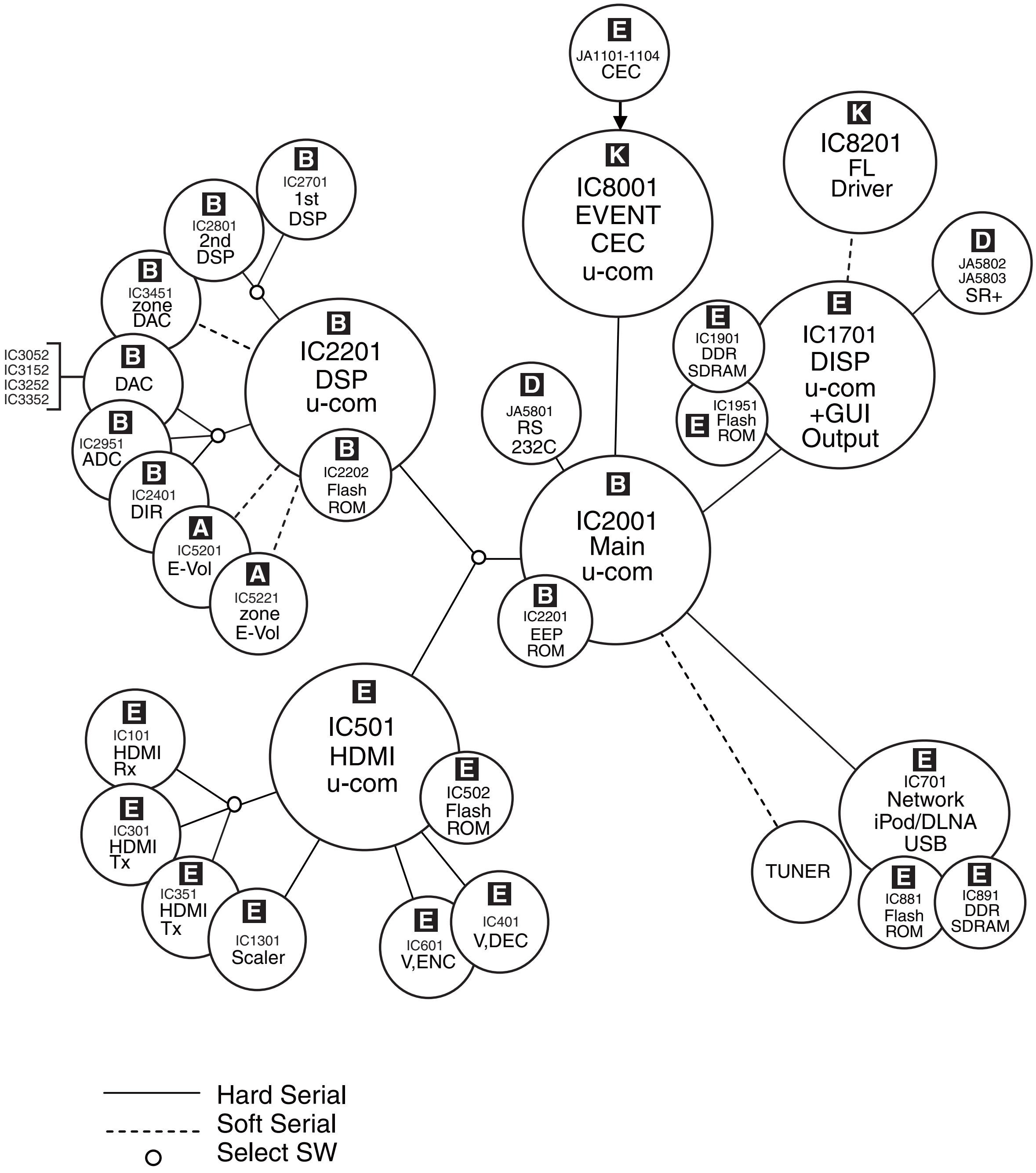
4.3 DSP BLOCK DIAGRAM


VOLUME CONTROL
CN2902
IC3451 ZONE2 DAC AK4387ET
IC3051(FL,FR) IC3151(C,SW) IC3251(SL,SR) IC3351(SBL,SBR) SC-LX81 MODEL ONLY SRC SRC4190IDB
IC3052(FL,FR) IC3152(C,SW) IC3252(SL,SR) IC3352(SBL,SBR) DAC WM8740SEDS
I2S
SPI
RST
SC-LX71 MODEL
IC2803 SELECTOR TC74LCX157FTS1
IC2805 BUFFER TC74LCX08FTS1
IC2202 FLASH ROM 4Mbit
16bit DATA BUS
18bit ADDRESS BUS
IC2802 FLASH ROM 1Mbit
I2C
IC2801 DSP2nd (PPP) FREESCALE DSPC56371AF180
IC2703 SDRAM 64Mbit
12bit ADDRESS BUS
16bit DATA BUS
8bit DATA BUS
21bit ADDRESS BUS
IC2702 FLASH ROM 16Mbit
IC2701 DSP1st (DECODER) FREESCALE DSP56720AG
I2S(2ch PCM)
IC2201 DSP µ-COM (128pin) PEG396A
IC2001 MAIN µ-COM PEG489B8
2ch PCM DIRECT
BASIC AUDIO
IC2403 SELECTOR TC74LCX157FTS1
IC2404 SELECTOR TC74LCX157FTS1
CN2003
CN2402(2/2)
CN2008
RST(NET)
I2S(NET)
I2S(HDMI)
RST(HDMI)
B D-MOTHER ASSY
IC2951 ADC PCM1804DB
IC2401 DIR & DIT AK4114VQ
FD
S/PDIF
E HDMI NETWORK ASSY
CN2901
CN2402 (1/2)
ANALOG IN
DIGITAL IN
DIGITAL OUT
A B C D E F

4.4 HDMI NETWORK BLOCK DIAGRAM


SC-LX81 model only
JA301
HDMI OUT1
JA351
HDMI OUT2
IC301
HDMI Tx
SiI9134CTU
IC351
HDMI Tx
SiI9134CTU
IC601
Video Encoder
ADV7172KSTZ
Component
S
CVBS
IC1384
IC1383
IC1381
BusBufferx3
TC74VCX541FT
ITU-R BT656
IC401
Video Decoder
ADV7800BSTZ
Component
S
CVBS
IC1301
Video Scaler
FLI2310-LF-CF
IC251
TC74VHC157FTS1
I2S
I2S/DSD
SPDIF/DSD
IC101
HDMI Rx
SiI9135CTU
BusBuffer
TC74VCX541FT
IC1404
IC1402
BusBuffer
TC74VCX541FT
HDMI/DVC Assy
Other circuit Block
JPEG Slideshow
ITU-R BT656
GUI
ITU-R BT656
Component
for SUB ROOM GUI
CVBS
IC1701
GUI
µPD61111
"EMMA2LL"
IC1151
HDMI Switch
SiI9185ACTU
IC701
Network Cont
DM850E
SPDIF
I2S
USB
HDMI
IC861
PHY
RTL8201CP
IC791
iPOD IC
341S2154
JA1104
JA1103
JA1102
JA1101
IN3
IN2
IN1
BD IN
JA701
Ethernet
TMDS
Video BUS
Analog Video
AUDIO

4.5 MICROCOMPUTER BLOCK DIAGRAM


E
JA1101-1104
CEC
K
IC8001
EVENT
CEC
u-com
K
IC8201
FL
Driver
D
JA5802
JA5803
SR+
E
IC1701
DISP
u-com
+GUI
Output
E
IC1901
DDR
SDRAM
E
IC1951
Flash
ROM
B
IC2701
1st
DSP
B
IC2801
2nd
DSP
B
IC3451
zone
DAC
IC3052
IC3152
IC3252
IC3352
B
DAC
B
IC2951
ADC
B
IC2401
DIR
A
IC5201
E-Vol
A
IC5221
zone
E-Vol
B
IC2201
DSP
u-com
B
IC2202
Flash
ROM
D
JA5801
RS
232C
B
IC2001
Main
u-com
B
IC2201
EEP
ROM
E
IC501
HDMI
u-com
E
IC502
Flash
ROM
E
IC101
HDMI
Rx
E
IC301
HDMI
Tx
E
IC351
HDMI
Tx
E
IC1301
Scaler
E
IC601
V,ENC
E
IC401
V,DEC
TUNER
E
IC701
Network
iPod/DLNA
USB
E
IC881
Flash
ROM
E
IC891
DDR
SDRAM
Hard Serial
Soft Serial
Select SW

A

B

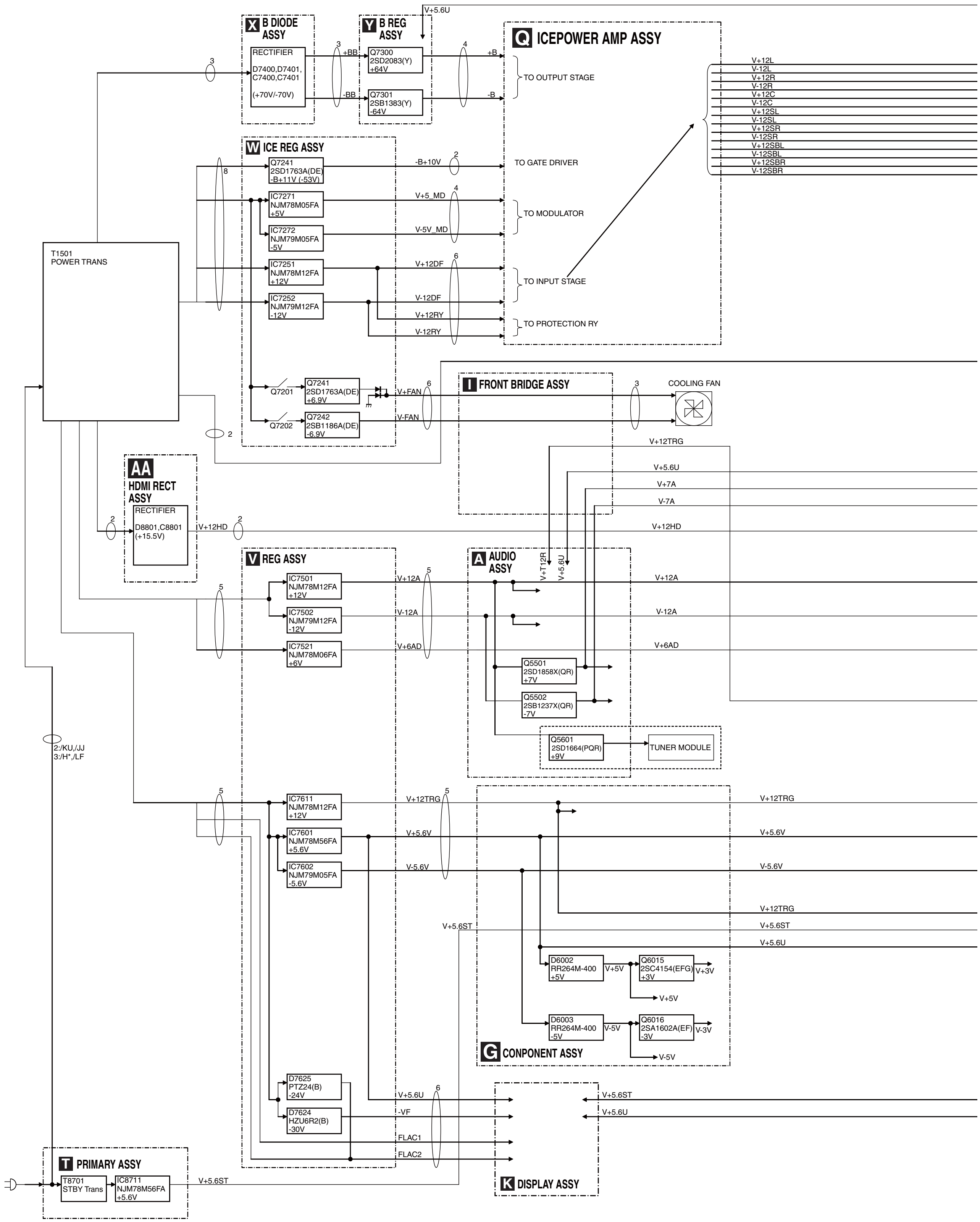
C

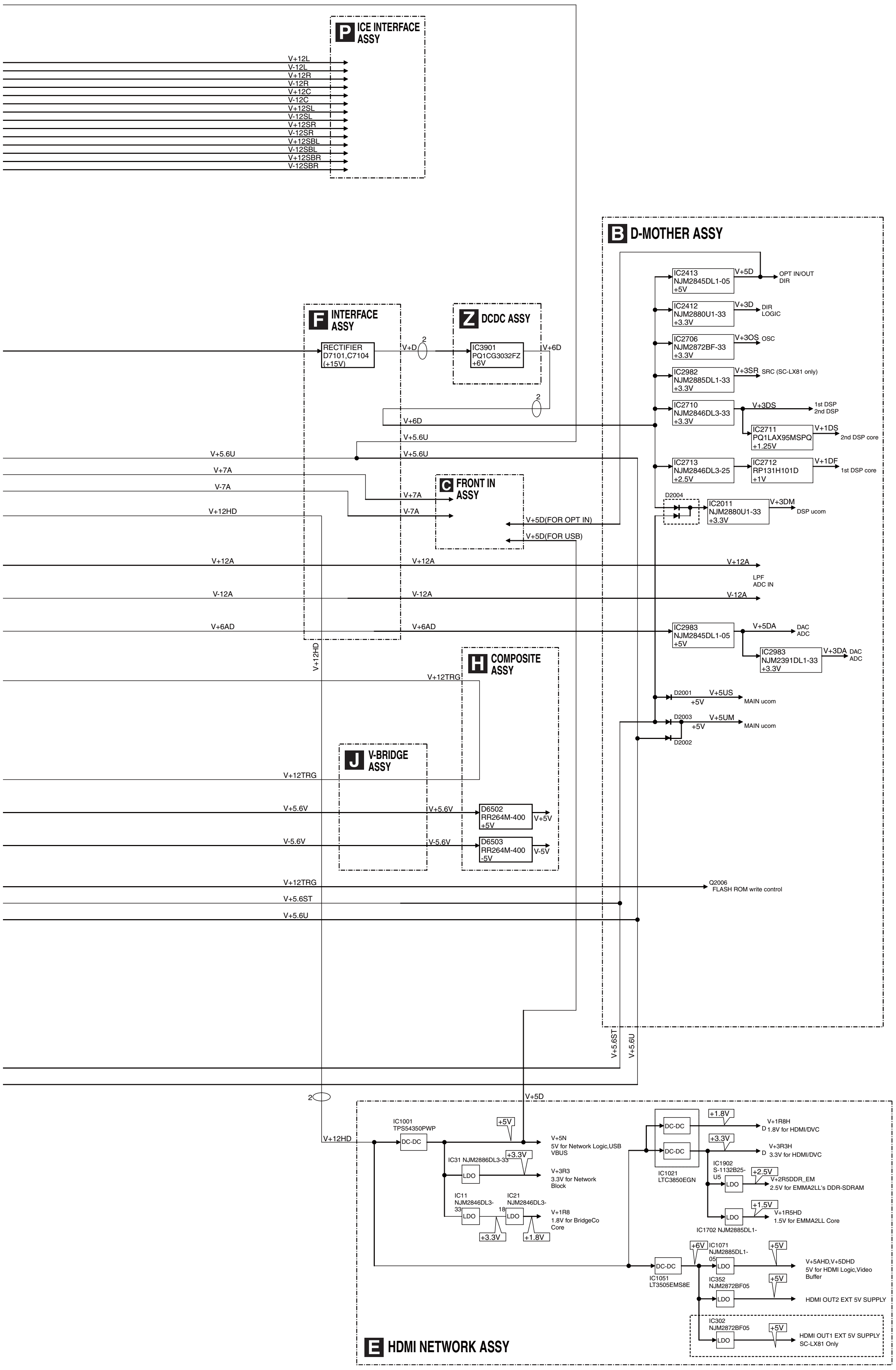
D

E

F

4.6 POWER BLOCK DIAGRAM

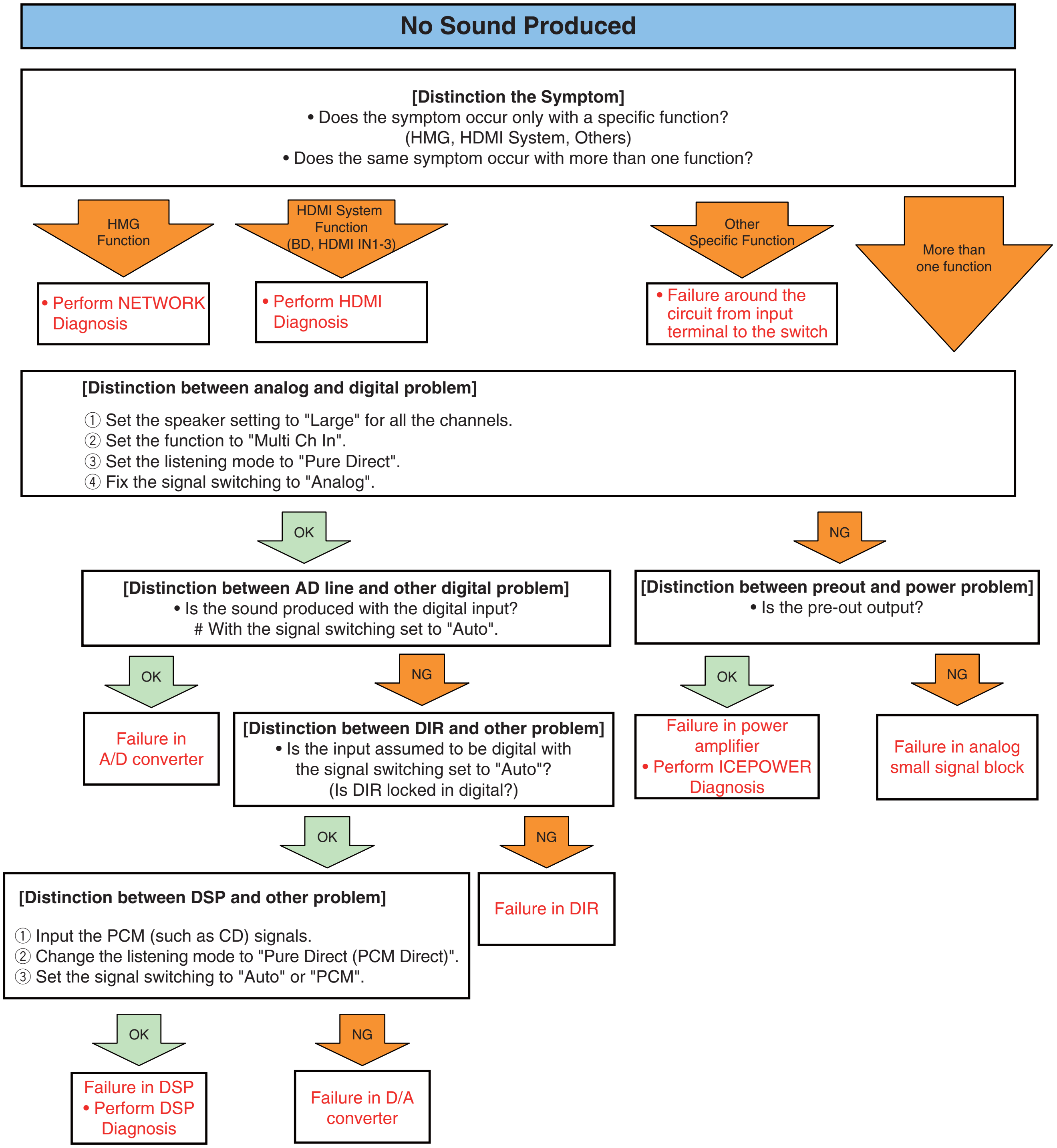

V+5.6U
X B DIODE ASSY
RECTIFIER
D7400,D7401, C7400,C7401
(+70V/-70V)
+BB
-BB
Y B REG ASSY
Q7300 2SD2083(Y) +64V
Q7301 2SB1383(Y) -64V
+B
-B
Q ICEPOWER AMP ASSY
TO OUTPUT STAGE
V+12L
V-12L
V+12R
V-12R
V+12C
V-12C
V+12SL
V-12SL
V+12SR
V-12SR
V+12SBL
V-12SBL
V+12SBR
V-12SBR
W ICE REG ASSY
Q7241 2SD1763A(DE) -B+11V (-53V)
-B+10V
TO GATE DRIVER
IC7271 NJM78M05FA +5V
V+5_MD
IC7272 NJM79M05FA -5V
V-5V_MD
TO MODULATOR
IC7251 NJM78M12FA +12V
V+12DF
TO INPUT STAGE
IC7252 NJM79M12FA -12V
V-12DF
V+12RY
V-12RY
TO PROTECTION RY
T1501 POWER TRANS
Q7201
Q7241 2SD1763A(DE) +6.9V
V+FAN
Q7202
Q7242 2SB1186A(DE) -6.9V
V-FAN
I FRONT BRIDGE ASSY
COOLING FAN
V+12TRG
V+5.6U
V+7A
V-7A
AA HDMI RECT ASSY
RECTIFIER
D8801,C8801 (+15.5V)
V+12HD
V REG ASSY
IC7501 NJM78M12FA +12V
V+12A
IC7502 NJM79M12FA -12V
V-12A
IC7521 NJM78M06FA +6V
V+6AD
A AUDIO ASSY
V+T12R
V+5.6U
Q5501 2SD1858X(QR) +7V
Q5502 2SB1237X(QR) -7V
Q5601 2SD1664(PQR) +9V
TUNER MODULE
2:/KU,/JJ
3:/H*,/LF
IC7611 NJM78M12FA +12V
V+12TRG
IC7601 NJM78M56FA +5.6V
V+5.6V
IC7602 NJM79M05FA -5.6V
V-5.6V
V+12TRG
V+5.6ST
V+5.6U
D6002 RR264M-400 +5V
V+5V
Q6015 2SC4154(EFG) +3V
V+3V
V+5V
D6003 RR264M-400 -5V
V-5V
Q6016 2SA1602A(EF) -3V
V-3V
V-5V
G CONPONENT ASSY
D7625 PTZ24(B) -24V
V+5.6U
D7624 HZU6R2(B) -30V
-VF
FLAC1
FLAC2
V+5.6ST
V+5.6U
K DISPLAY ASSY
T PRIMARY ASSY
T8701 STBY Trans
IC8711 NJM78M56FA +5.6V
V+5.6ST
2
3
4
5
6
8


P ICE INTERFACE ASSY
V+12L
V-12L
V+12R
V-12R
V+12C
V-12C
V+12SL
V-12SL
V+12SR
V-12SR
V+12SBL
V-12SBL
V+12SBR
V-12SBR
B D-MOTHER ASSY
IC2413 NJM2845DL1-05 +5V
V+5D
OPT IN/OUT DIR
IC2412 NJM2880U1-33 +3.3V
V+3D
DIR LOGIC
IC2706 NJM2872BF-33 +3.3V
V+3OS
OSC
IC2982 NJM2885DL1-33 +3.3V
V+3SR
SRC (SC-LX81 only)
IC2710 NJM2846DL3-33 +3.3V
V+3DS
1st DSP 2nd DSP
IC2711 PQ1LAX95MSPQ +1.25V
V+1DS
2nd DSP core
IC2713 NJM2846DL3-25 +2.5V
IC2712 RP131H101D +1V
V+1DF
1st DSP core
D2004
IC2011 NJM2880U1-33 +3.3V
V+3DM
DSP ucom
F INTERFACE ASSY
RECTIFIER D7101,C7104 (+15V)
V+D
2
Z DCDC ASSY
IC3901 PQ1CG3032FZ +6V
V+6D
2
V+6D
V+5.6U
V+5.6U
V+5.6U
V+7A
V-7A
V+12HD
C FRONT IN ASSY
V+7A
V-7A
V+5D(FOR OPT IN)
V+5D(FOR USB)
V+12A
V+12A
V+12A
LPF ADC IN
V-12A
V-12A
V-12A
V+6AD
V+6AD
IC2983 NJM2845DL1-05 +5V
V+5DA
DAC ADC
IC2983 NJM2391DL1-33 +3.3V
V+3DA
DAC ADC
V+12HD
H COMPOSITE ASSY
V+12TRG
D2001
+5V
V+5US
MAIN ucom
D2003
+5V
V+5UM
MAIN ucom
D2002
J V-BRIDGE ASSY
V+12TRG
V+5.6V
V+5.6V
D6502 RR264M-400 +5V
V+5V
V-5.6V
V-5.6V
D6503 RR264M-400 -5V
V-5V
V+12TRG
Q2006 FLASH ROM write control
V+5.6ST
V+5.6U
V+5.6ST
V+5.6U
2
V+5D
V+12HD
IC1001 TPS54350PWP
DC-DC
+5V
V+5N 5V for Network Logic,USB VBUS
IC31 NJM2886DL3-33
+3.3V
LDO
V+3R3 3.3V for Network Block
IC11 NJM2846DL3-33
IC21 NJM2846DL3-18
LDO
LDO
+3.3V
+1.8V
V+1R8 1.8V for BridgeCo Core
DC-DC
DC-DC
IC1021 LTC3850EGN
+1.8V
V+1R8H
D 1.8V for HDMI/DVC
+3.3V
V+3R3H
D 3.3V for HDMI/DVC
IC1902 S-1132B25-U5
LDO
+2.5V
V+2R5DDR_EM 2.5V for EMMA2LL's DDR-SDRAM
LDO
+1.5V
V+1R5HD 1.5V for EMMA2LL Core
IC1702 NJM2885DL1-
DC-DC
IC1051 LT3505EMS8E
+6V
IC1071 NJM2885DL1-05
LDO
+5V
V+5AHD,V+5DHD 5V for HDMI Logic,Video Buffer
IC352 NJM2872BF05
LDO
+5V
HDMI OUT2 EXT 5V SUPPLY
IC302 NJM2872BF05
LDO
+5V
HDMI OUT1 EXT 5V SUPPLY SC-LX81 Only
E HDMI NETWORK ASSY

5. DIAGNOSIS

5.1 DIAGNOSIS FLOWCHART

[1] Audio Section Troubleshooting


No Sound Produced
[Distinction the Symptom]
• Does the symptom occur only with a specific function?
(HMG, HDMI System, Others)
• Does the same symptom occur with more than one function?
HMG Function
• Perform NETWORK Diagnosis
HDMI System Function (BD, HDMI IN1-3)
• Perform HDMI Diagnosis
Other Specific Function
• Failure around the circuit from input terminal to the switch
More than one function
[Distinction between analog and digital problem]
① Set the speaker setting to "Large" for all the channels.
② Set the function to "Multi Ch In".
③ Set the listening mode to "Pure Direct".
④ Fix the signal switching to "Analog".
OK
NG
[Distinction between AD line and other digital problem]
• Is the sound produced with the digital input?
# With the signal switching set to "Auto".
[Distinction between preout and power problem]
• Is the pre-out output?
OK
NG
OK
NG
Failure in A/D converter
[Distinction between DIR and other problem]
• Is the input assumed to be digital with the signal switching set to "Auto"?
(Is DIR locked in digital?)
Failure in power amplifier
• Perform ICEPOWER Diagnosis
Failure in analog small signal block
OK
NG
[Distinction between DSP and other problem]
① Input the PCM (such as CD) signals.
② Change the listening mode to "Pure Direct (PCM Direct)".
③ Set the signal switching to "Auto" or "PCM".
Failure in DIR
OK
NG
Failure in DSP
• Perform DSP Diagnosis
Failure in D/A converter

[2] DSP Troubleshooting

1) Simplified diagnosis

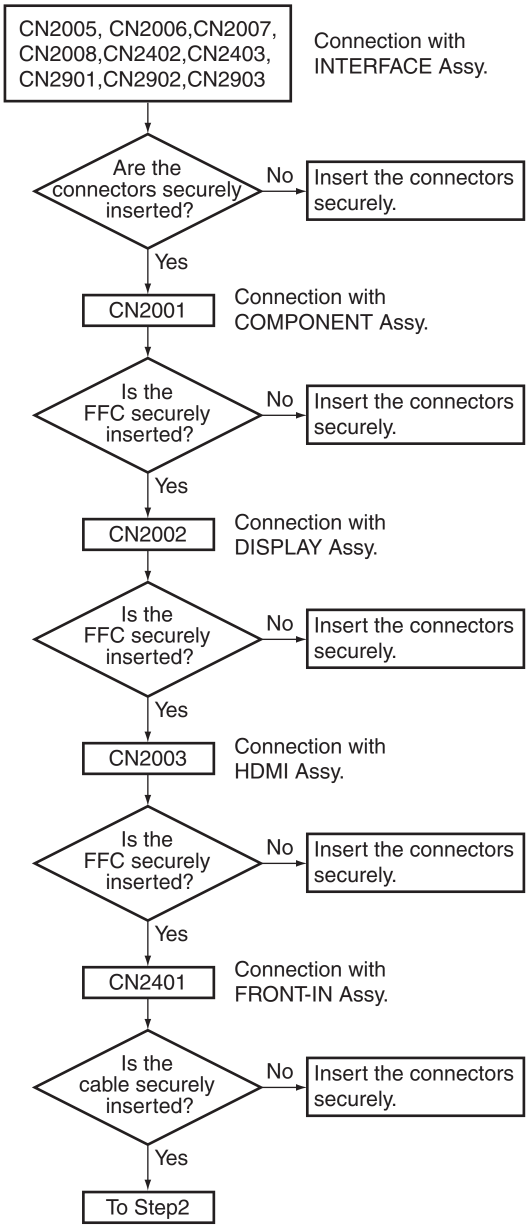
DSP block malfunction is detected.
(The part can be roughly expected just by operation of the main unit.)

- Has DSP block caused the malfunction?
  Inputing a 2ch PCM (such as CD) digital signal, check if the sound plays by switching AUTO SURR / STREAM DIRECT. When the sound doesn't play in AUTO SURROUND or DIRECT MODE though it does in PURE DIRECT (PCM DIRECT) MODE, DSP block might be defective.

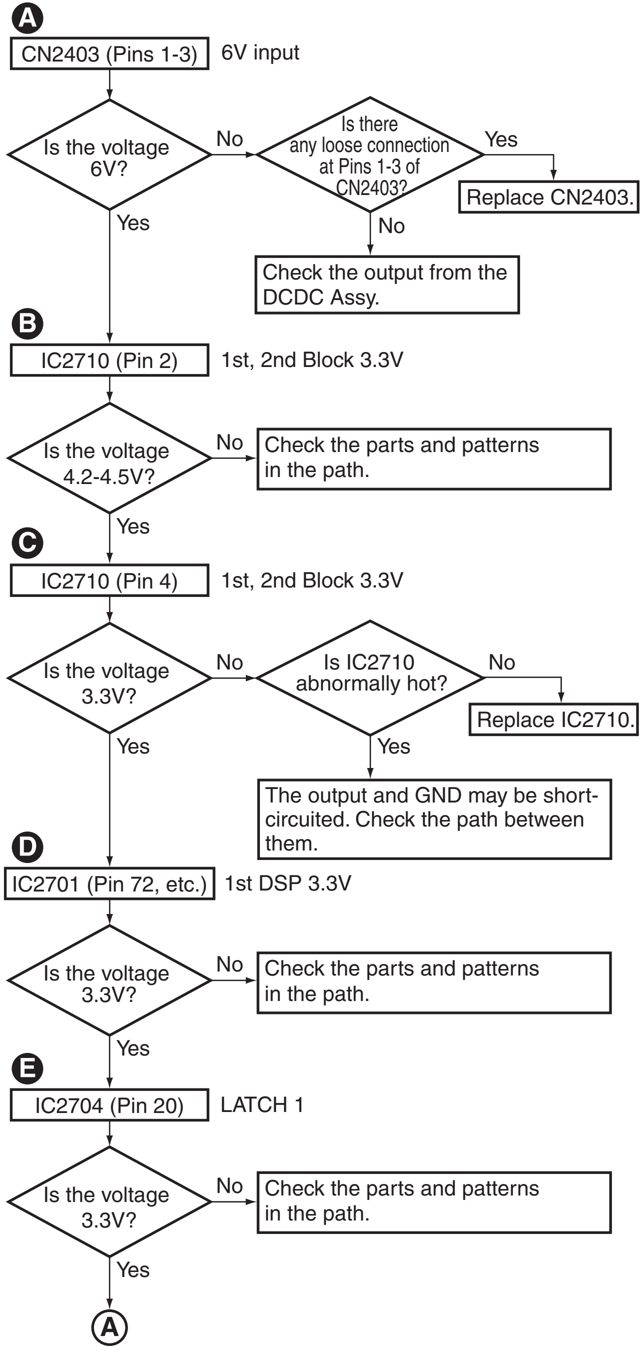
2) Troubleshooting

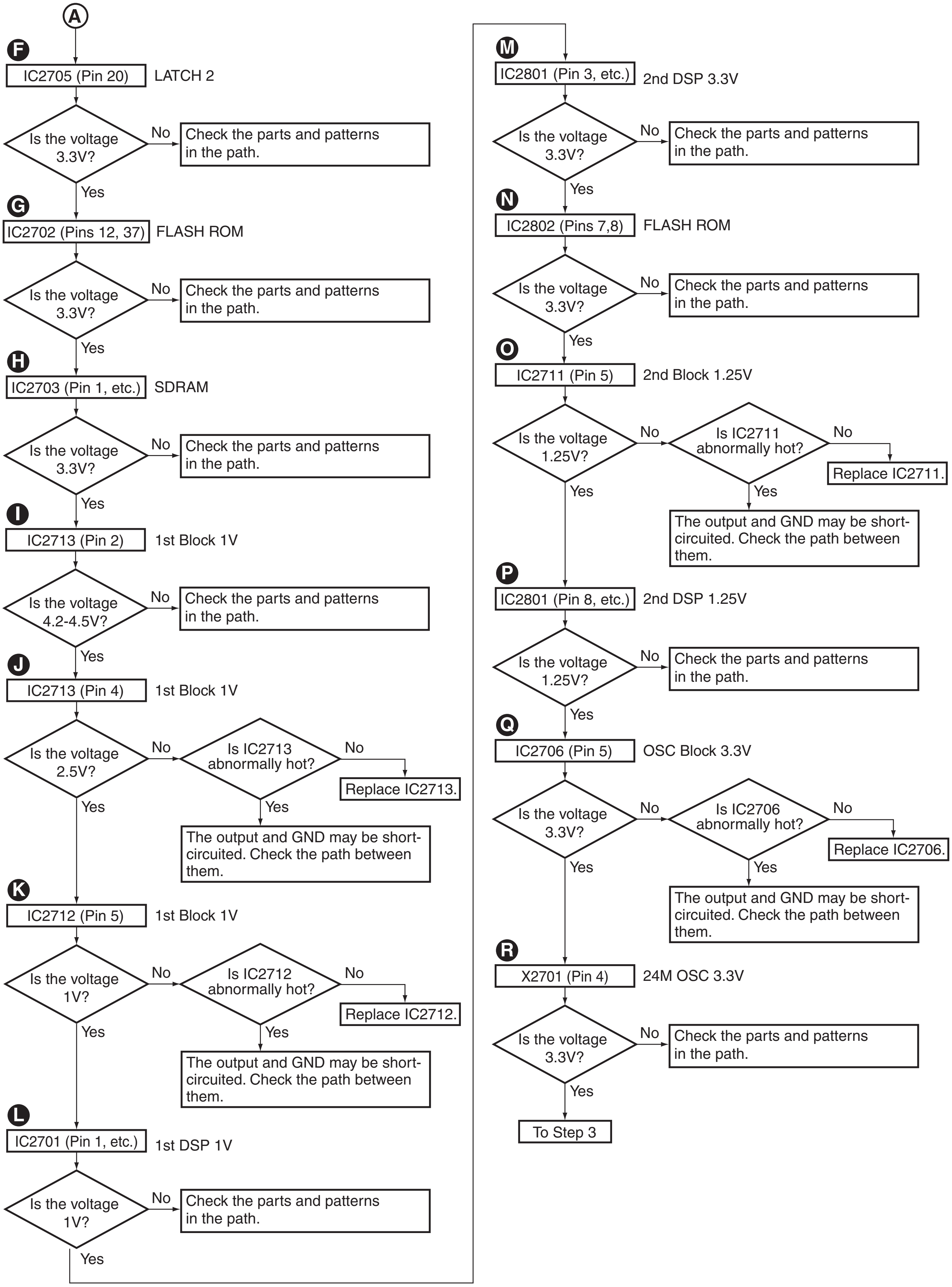
- It is assumed that there is no loose connection or damage in the LCRs.
- Refer to "DIGITAL MOTHER Assy Check Points (DSP Section)" as the parts marked Ⓐ to (AY) in the troubleshooting are located.

Step 1: Connections

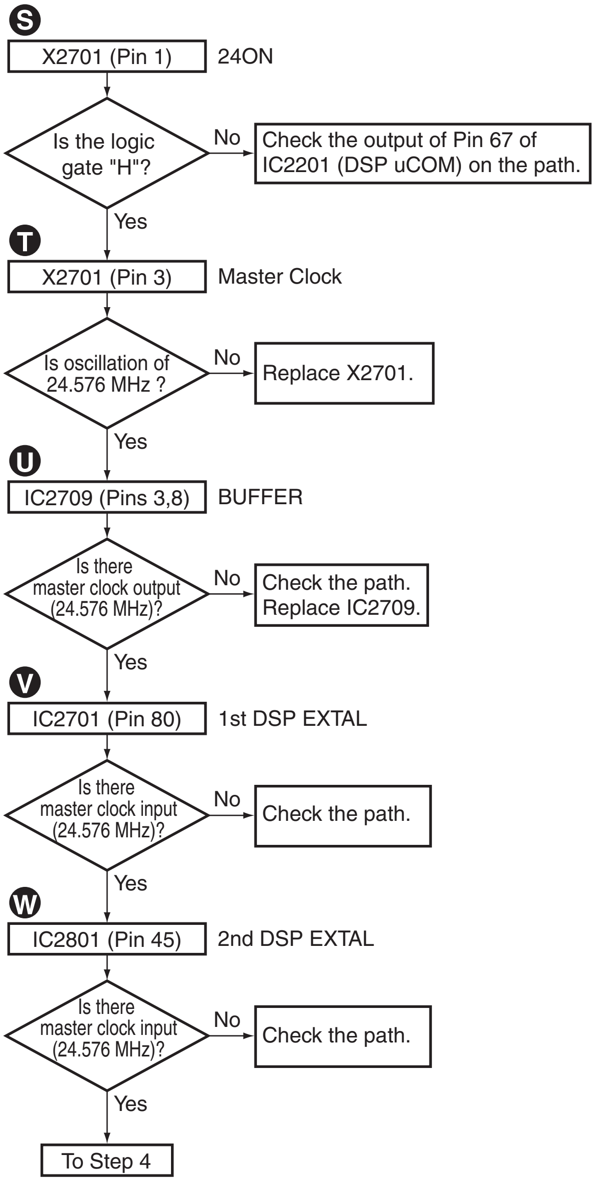

CN2005, CN2006,CN2007, CN2008,CN2402,CN2403, CN2901,CN2902,CN2903
Connection with INTERFACE Assy.
Are the connectors securely inserted?
No
Insert the connectors securely.
Yes
CN2001
Connection with COMPONENT Assy.
Is the FFC securely inserted?
No
Insert the connectors securely.
Yes
CN2002
Connection with DISPLAY Assy.
Is the FFC securely inserted?
No
Insert the connectors securely.
Yes
CN2003
Connection with HDMI Assy.
Is the FFC securely inserted?
No
Insert the connectors securely.
Yes
CN2401
Connection with FRONT-IN Assy.
Is the cable securely inserted?
No
Insert the connectors securely.
Yes
To Step2

Step 2: Power supply

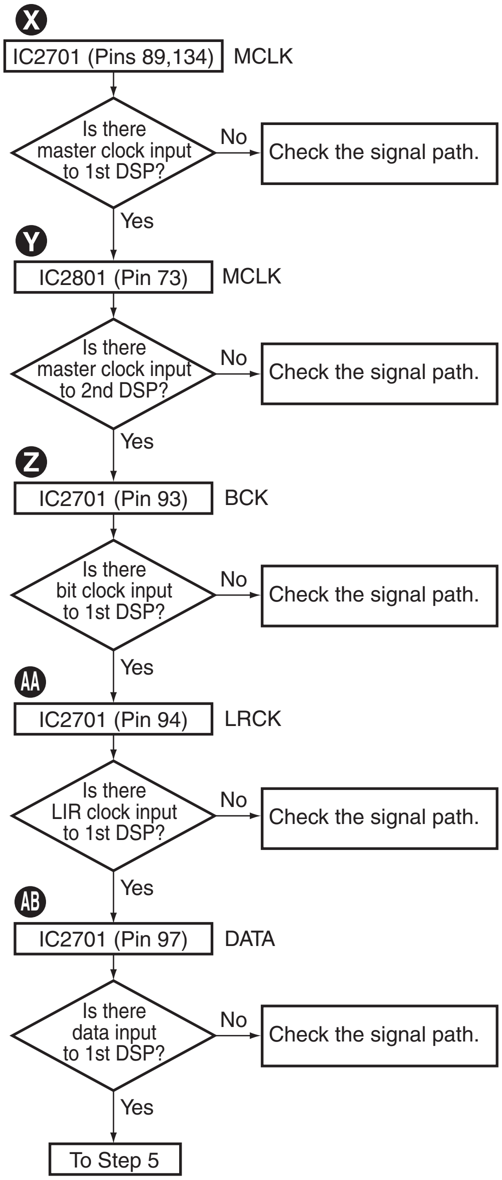

A
CN2403 (Pins 1-3)
6V input
Is the voltage 6V?
No
Is there any loose connection at Pins 1-3 of CN2403?
Yes
Replace CN2403.
No
Check the output from the DCDC Assy.
Yes
B
IC2710 (Pin 2)
1st, 2nd Block 3.3V
Is the voltage 4.2-4.5V?
No
Check the parts and patterns in the path.
Yes
C
IC2710 (Pin 4)
1st, 2nd Block 3.3V
Is the voltage 3.3V?
No
Is IC2710 abnormally hot?
No
Replace IC2710.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
D
IC2701 (Pin 72, etc.)
1st DSP 3.3V
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
E
IC2704 (Pin 20)
LATCH 1
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
A


A
F
IC2705 (Pin 20)
LATCH 2
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
G
IC2702 (Pins 12, 37)
FLASH ROM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
H
IC2703 (Pin 1, etc.)
SDRAM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
I
IC2713 (Pin 2)
1st Block 1V
Is the voltage 4.2-4.5V?
No
Check the parts and patterns in the path.
Yes
J
IC2713 (Pin 4)
1st Block 1V
Is the voltage 2.5V?
No
Is IC2713 abnormally hot?
No
Replace IC2713.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
K
IC2712 (Pin 5)
1st Block 1V
Is the voltage 1V?
No
Is IC2712 abnormally hot?
No
Replace IC2712.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
L
IC2701 (Pin 1, etc.)
1st DSP 1V
Is the voltage 1V?
No
Check the parts and patterns in the path.
Yes
M
IC2801 (Pin 3, etc.)
2nd DSP 3.3V
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
N
IC2802 (Pins 7,8)
FLASH ROM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
O
IC2711 (Pin 5)
2nd Block 1.25V
Is the voltage 1.25V?
No
Is IC2711 abnormally hot?
No
Replace IC2711.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
P
IC2801 (Pin 8, etc.)
2nd DSP 1.25V
Is the voltage 1.25V?
No
Check the parts and patterns in the path.
Yes
Q
IC2706 (Pin 5)
OSC Block 3.3V
Is the voltage 3.3V?
No
Is IC2706 abnormally hot?
No
Replace IC2706.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
R
X2701 (Pin 4)
24M OSC 3.3V
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
To Step 3

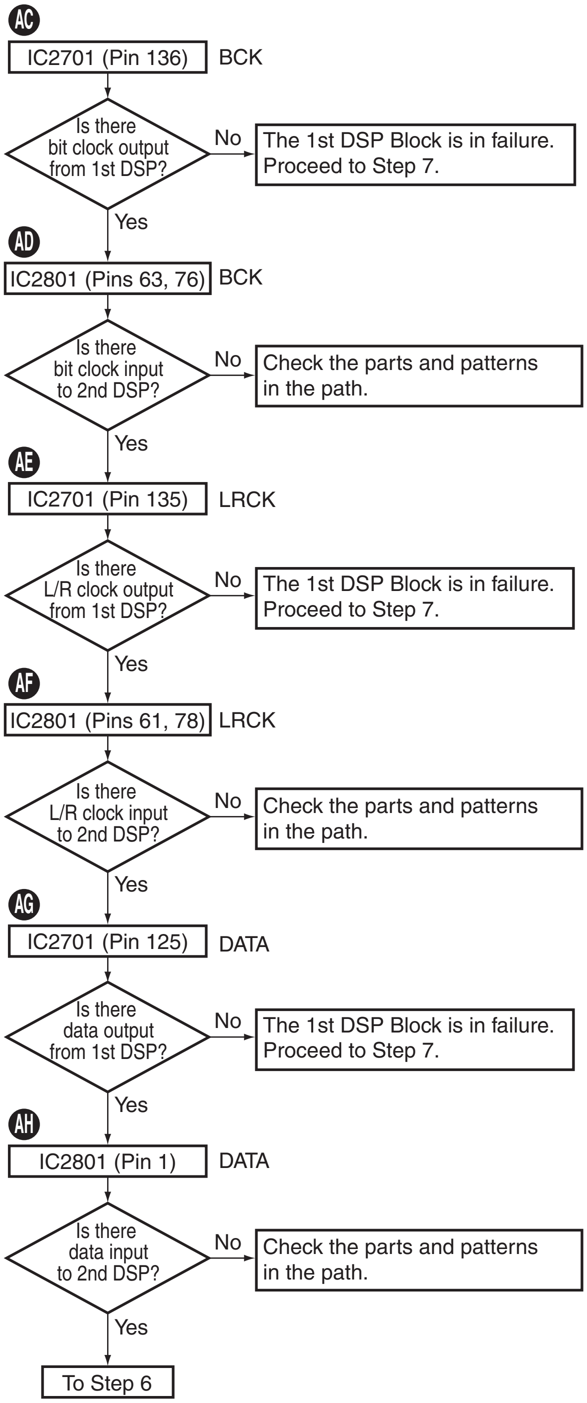
Step 3: Master Clock


S
X2701 (Pin 1)
24ON
Is the logic gate "H"?
No
Check the output of Pin 67 of IC2201 (DSP uCOM) on the path.
Yes
T
X2701 (Pin 3)
Master Clock
Is oscillation of 24.576 MHz ?
No
Replace X2701.
Yes
U
IC2709 (Pins 3,8)
BUFFER
Is there master clock output (24.576 MHz)?
No
Check the path.
Replace IC2709.
Yes
V
IC2701 (Pin 80)
1st DSP EXTAL
Is there master clock input (24.576 MHz)?
No
Check the path.
Yes
W
IC2801 (Pin 45)
2nd DSP EXTAL
Is there master clock input (24.576 MHz)?
No
Check the path.
Yes
To Step 4

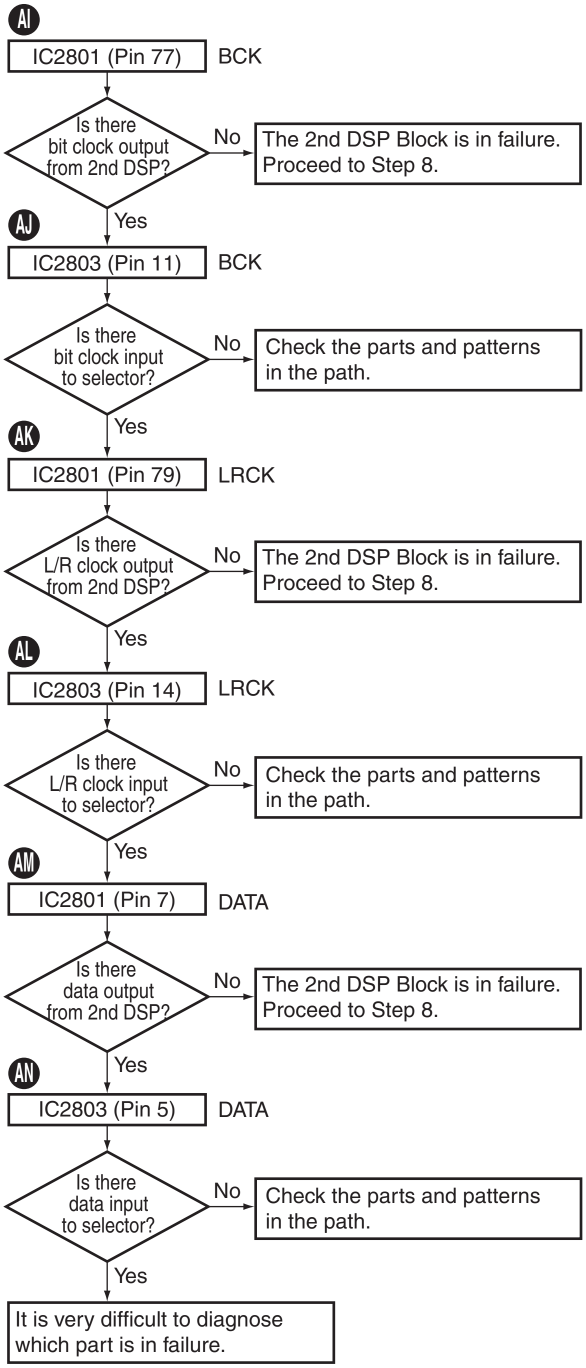
Step 4: Audio Signal


X
IC2701 (Pins 89,134)
MCLK
Is there master clock input to 1st DSP?
No
Check the signal path.
Yes
Y
IC2801 (Pin 73)
MCLK
Is there master clock input to 2nd DSP?
No
Check the signal path.
Yes
Z
IC2701 (Pin 93)
BCK
Is there bit clock input to 1st DSP?
No
Check the signal path.
Yes
AA
IC2701 (Pin 94)
LRCK
Is there LIR clock input to 1st DSP?
No
Check the signal path.
Yes
AB
IC2701 (Pin 97)
DATA
Is there data input to 1st DSP?
No
Check the signal path.
Yes
To Step 5

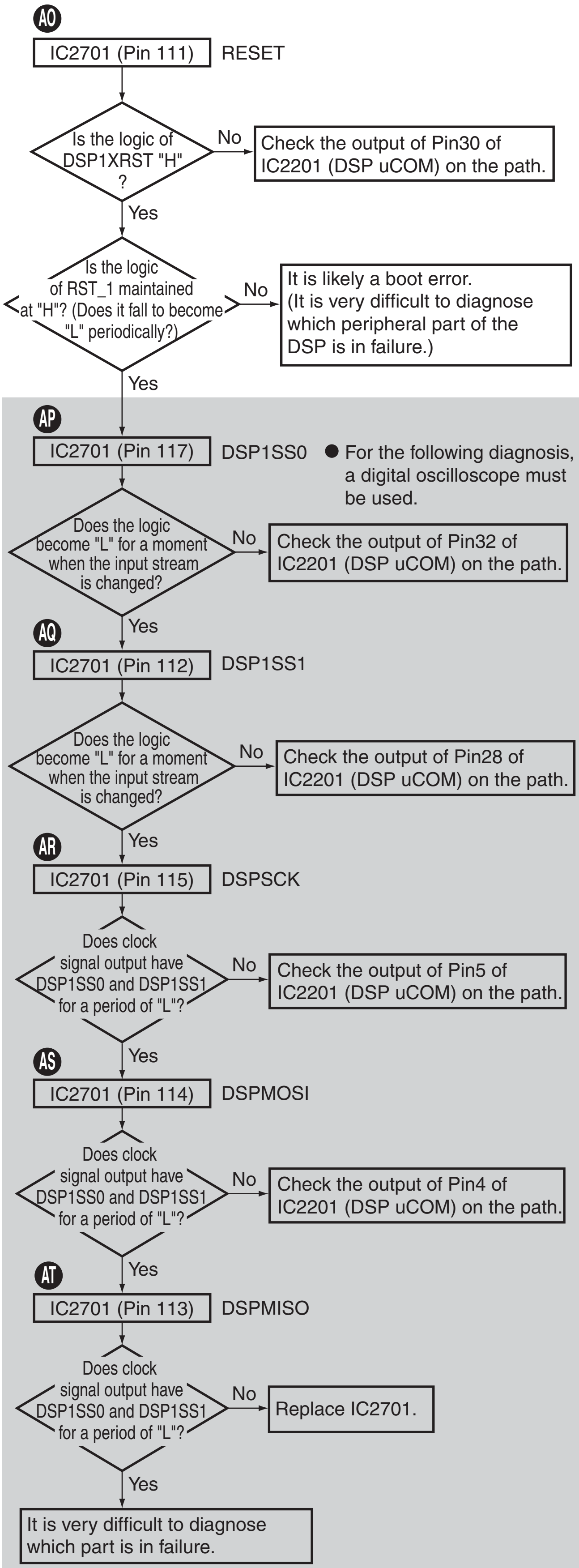
Step 5: Audio Signal


AC
IC2701 (Pin 136)
BCK
Is there bit clock output from 1st DSP?
No
The 1st DSP Block is in failure. Proceed to Step 7.
Yes
AD
IC2801 (Pins 63, 76)
BCK
Is there bit clock input to 2nd DSP?
No
Check the parts and patterns in the path.
Yes
AE
IC2701 (Pin 135)
LRCK
Is there L/R clock output from 1st DSP?
No
The 1st DSP Block is in failure. Proceed to Step 7.
Yes
AF
IC2801 (Pins 61, 78)
LRCK
Is there L/R clock input to 2nd DSP?
No
Check the parts and patterns in the path.
Yes
AG
IC2701 (Pin 125)
DATA
Is there data output from 1st DSP?
No
The 1st DSP Block is in failure. Proceed to Step 7.
Yes
AH
IC2801 (Pin 1)
DATA
Is there data input to 2nd DSP?
No
Check the parts and patterns in the path.
Yes
To Step 6

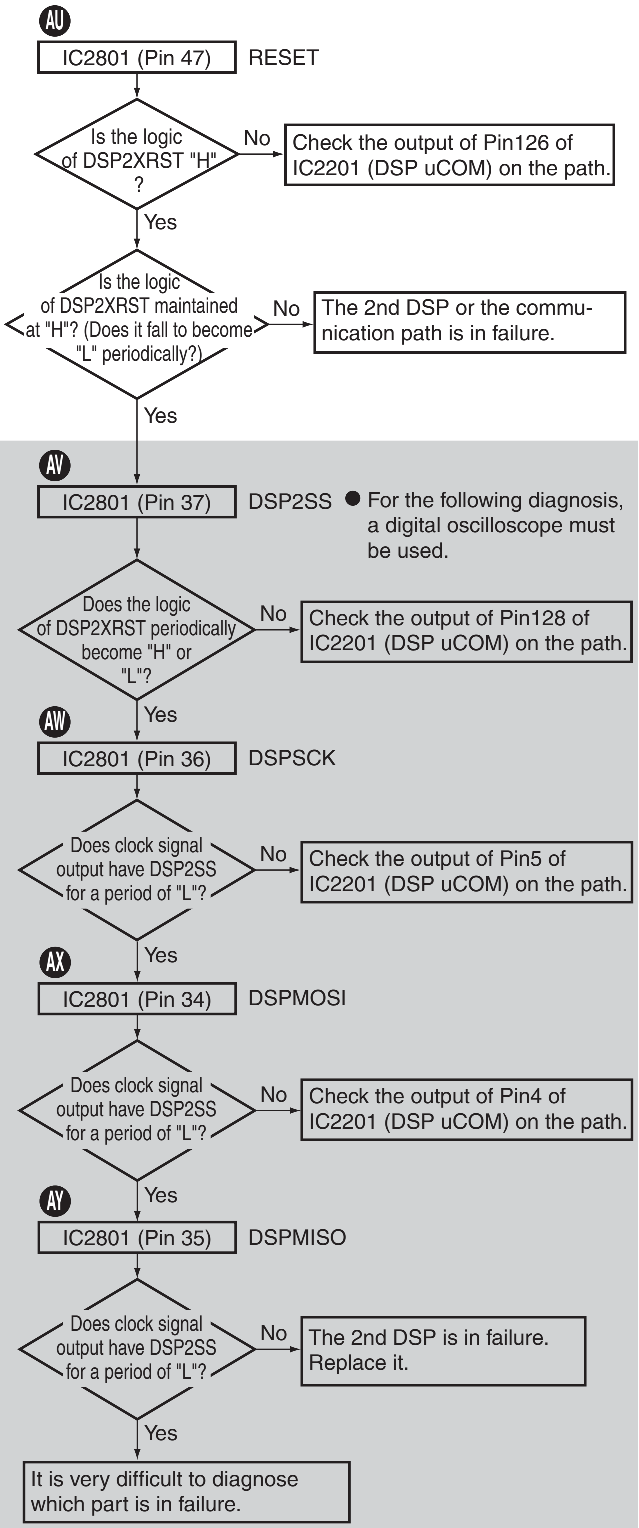
Step 6: Audio Signal


AI
IC2801 (Pin 77)
BCK
Is there bit clock output from 2nd DSP?
No
The 2nd DSP Block is in failure. Proceed to Step 8.
Yes
AJ
IC2803 (Pin 11)
BCK
Is there bit clock input to selector?
No
Check the parts and patterns in the path.
Yes
AK
IC2801 (Pin 79)
LRCK
Is there L/R clock output from 2nd DSP?
No
The 2nd DSP Block is in failure. Proceed to Step 8.
Yes
AL
IC2803 (Pin 14)
LRCK
Is there L/R clock input to selector?
No
Check the parts and patterns in the path.
Yes
AM
IC2801 (Pin 7)
DATA
Is there data output from 2nd DSP?
No
The 2nd DSP Block is in failure. Proceed to Step 8.
Yes
AN
IC2803 (Pin 5)
DATA
Is there data input to selector?
No
Check the parts and patterns in the path.
Yes
It is very difficult to diagnose which part is in failure.

Step 7: 1st DSP

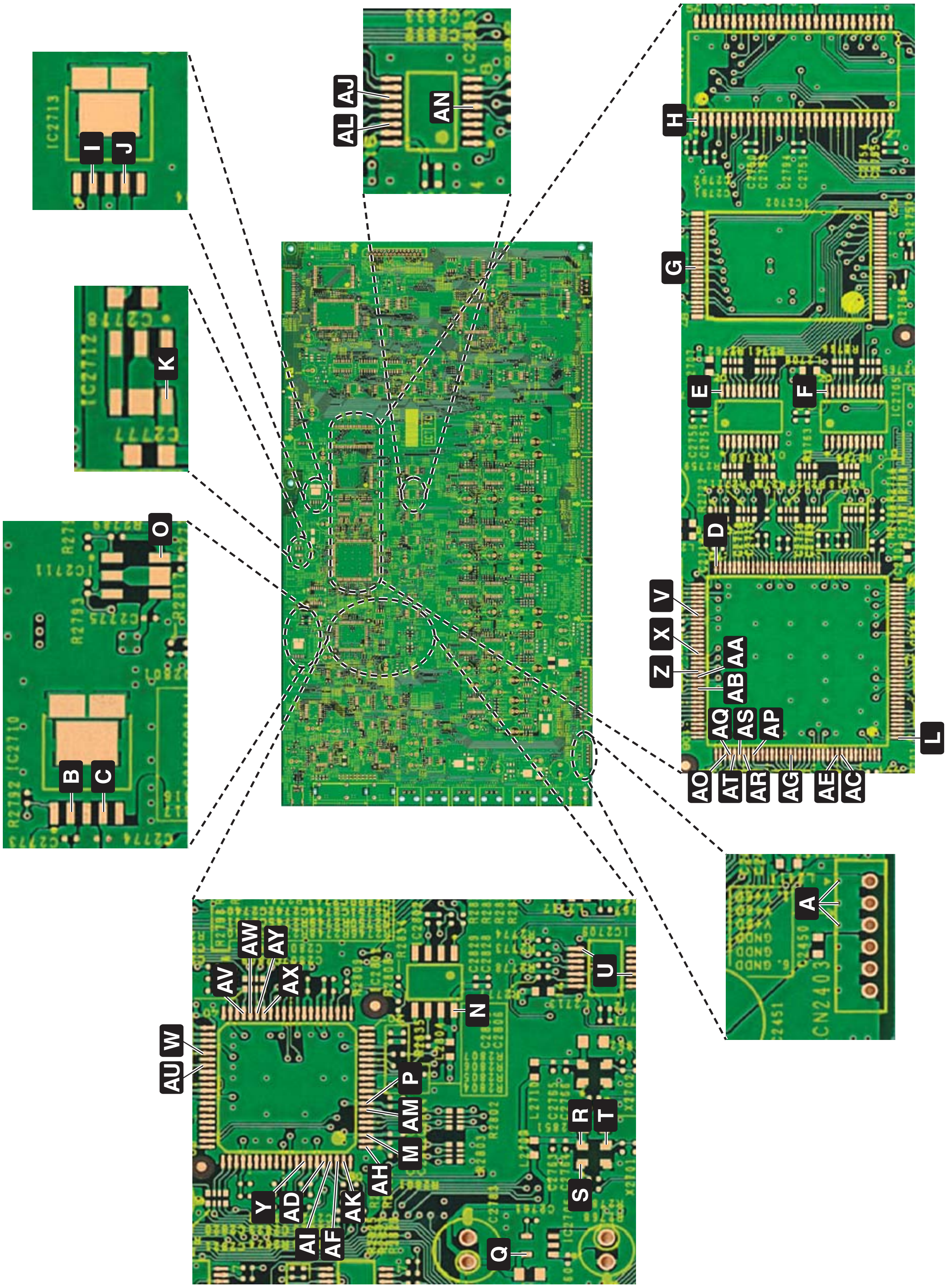

AO
IC2701 (Pin 111)
RESET
Is the logic of DSP1XRST "H" ?
No
Check the output of Pin30 of IC2201 (DSP uCOM) on the path.
Yes
Is the logic of RST_1 maintained at "H"? (Does it fall to become "L" periodically?)
No
It is likely a boot error. (It is very difficult to diagnose which peripheral part of the DSP is in failure.)
Yes
AP
IC2701 (Pin 117)
DSP1SS0
● For the following diagnosis, a digital oscilloscope must be used.
Does the logic become "L" for a moment when the input stream is changed?
No
Check the output of Pin32 of IC2201 (DSP uCOM) on the path.
Yes
AQ
IC2701 (Pin 112)
DSP1SS1
Does the logic become "L" for a moment when the input stream is changed?
No
Check the output of Pin28 of IC2201 (DSP uCOM) on the path.
Yes
AR
IC2701 (Pin 115)
DSPSCK
Does clock signal output have DSP1SS0 and DSP1SS1 for a period of "L"?
No
Check the output of Pin5 of IC2201 (DSP uCOM) on the path.
Yes
AS
IC2701 (Pin 114)
DSPMOSI
Does clock signal output have DSP1SS0 and DSP1SS1 for a period of "L"?
No
Check the output of Pin4 of IC2201 (DSP uCOM) on the path.
Yes
AT
IC2701 (Pin 113)
DSPMISO
Does clock signal output have DSP1SS0 and DSP1SS1 for a period of "L"?
No
Replace IC2701.
Yes
It is very difficult to diagnose which part is in failure.

Step 8: 2nd DSP


AU
IC2801 (Pin 47)
RESET
Is the logic of DSP2XRST "H" ?
No
Check the output of Pin126 of IC2201 (DSP uCOM) on the path.
Yes
Is the logic of DSP2XRST maintained at "H"? (Does it fall to become "L" periodically?)
No
The 2nd DSP or the communication path is in failure.
Yes
AV
IC2801 (Pin 37)
DSP2SS
● For the following diagnosis, a digital oscilloscope must be used.
Does the logic of DSP2XRST periodically become "H" or "L"?
No
Check the output of Pin128 of IC2201 (DSP uCOM) on the path.
Yes
AW
IC2801 (Pin 36)
DSPSCK
Does clock signal output have DSP2SS for a period of "L"?
No
Check the output of Pin5 of IC2201 (DSP uCOM) on the path.
Yes
AX
IC2801 (Pin 34)
DSPMOSI
Does clock signal output have DSP2SS for a period of "L"?
No
Check the output of Pin4 of IC2201 (DSP uCOM) on the path.
Yes
AY
IC2801 (Pin 35)
DSPMISO
Does clock signal output have DSP2SS for a period of "L"?
No
The 2nd DSP is in failure. Replace it.
Yes
It is very difficult to diagnose which part is in failure.

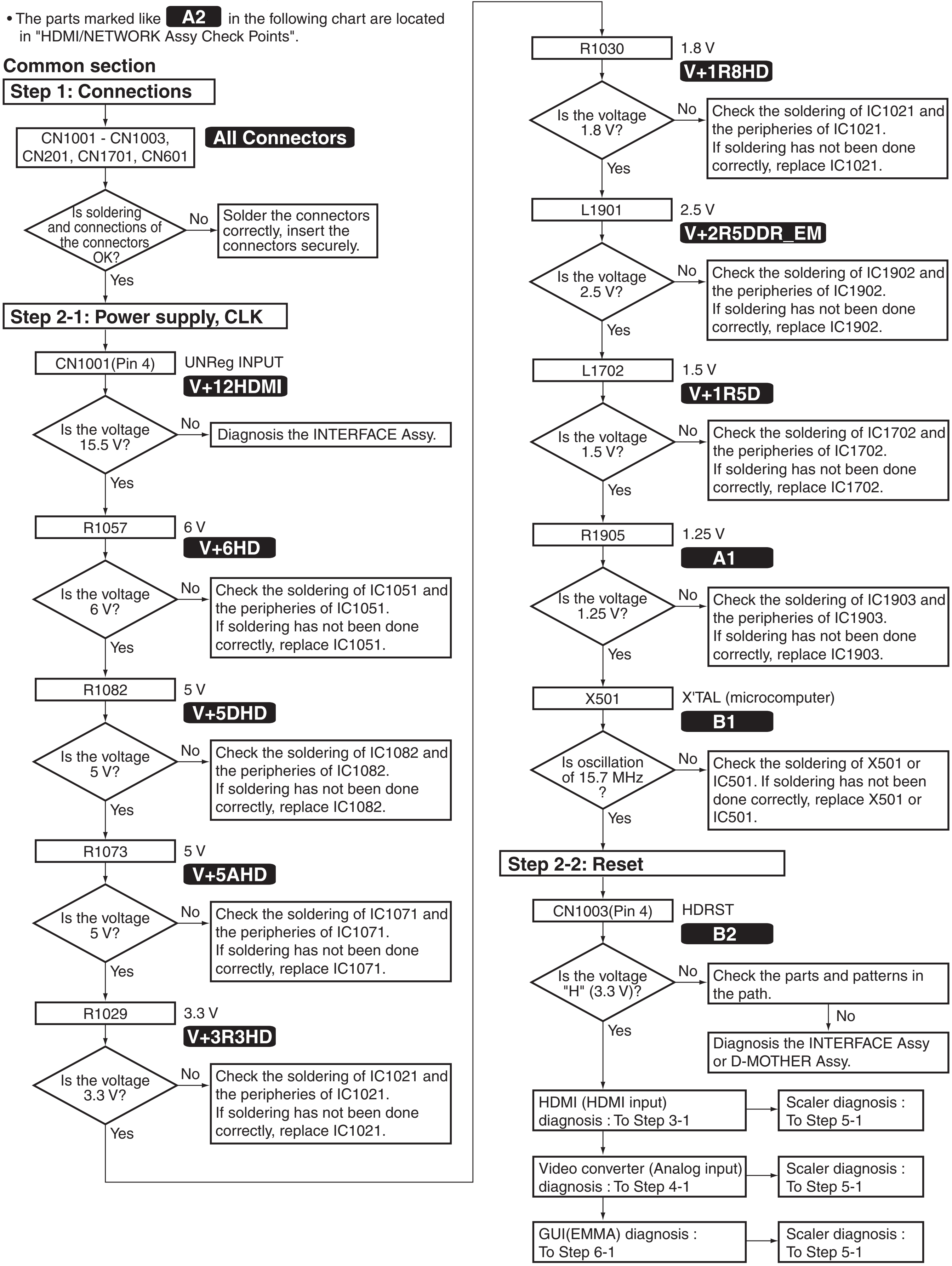
3) D-MOTHER Assy check points (DSP section)

B D-MOTHER ASSY SIDE A

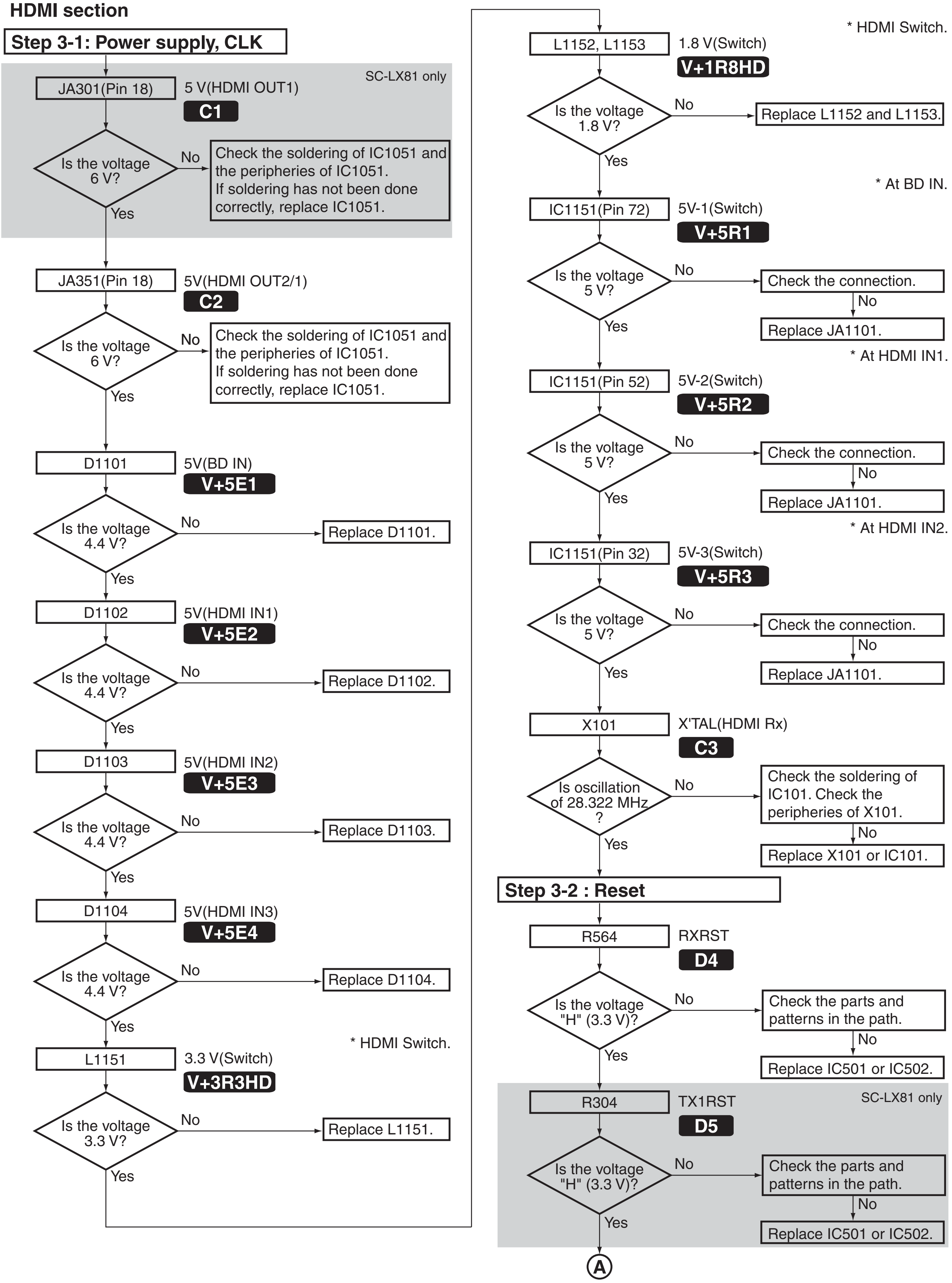

I
J
AJ
AL
AN
H
G
K
E
F
O
D
V
X
Z
AA
AB
AQ
AS
AP
L
AO
AT
AR
AG
AE
AC
B
C
A
AV
AW
AY
AX
U
N
W
AU
P
AM
M
AH
R
T
S
Y
AD
AK
AI
AF
Q

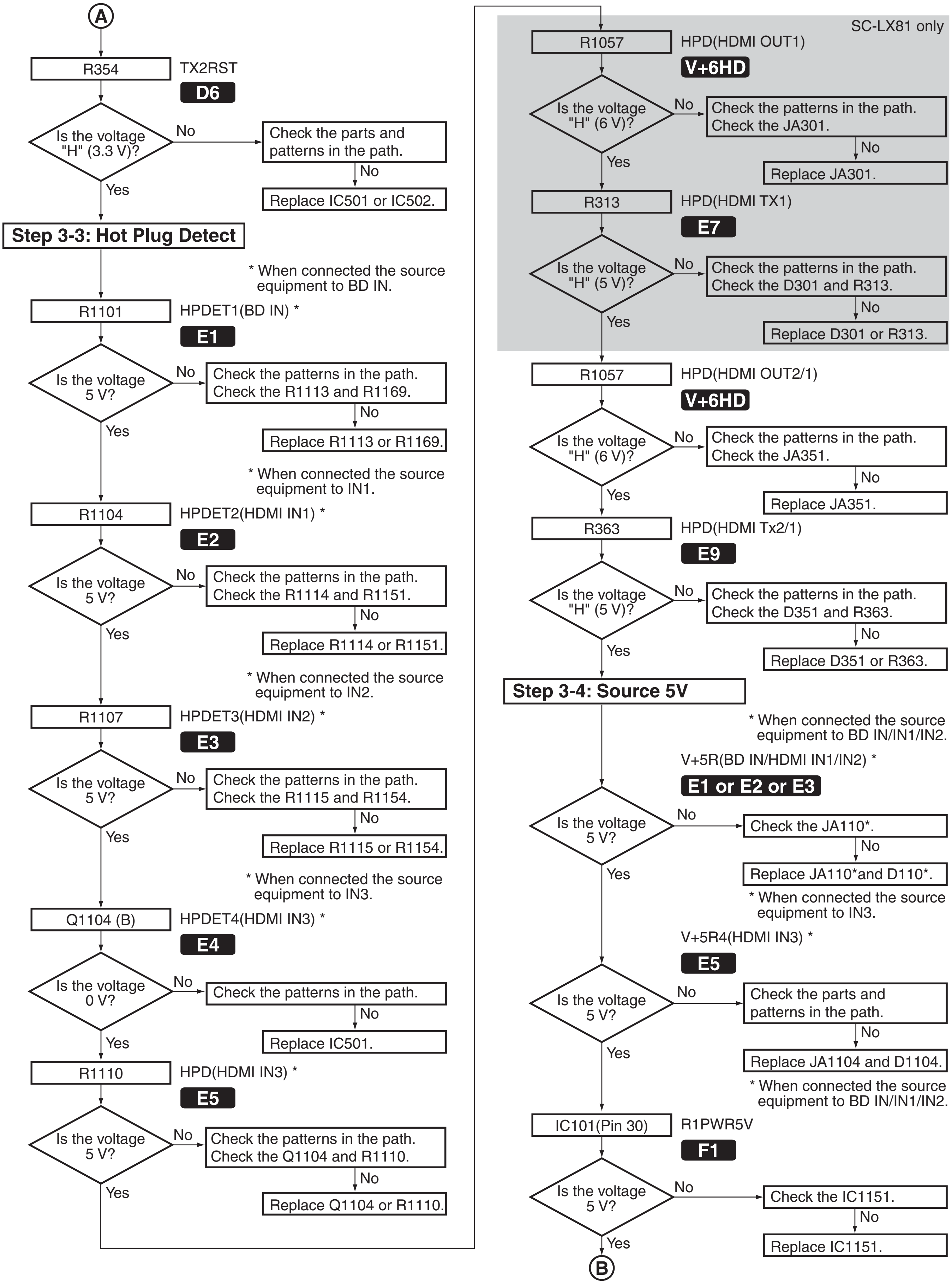
[3] HDMI Troubleshooting

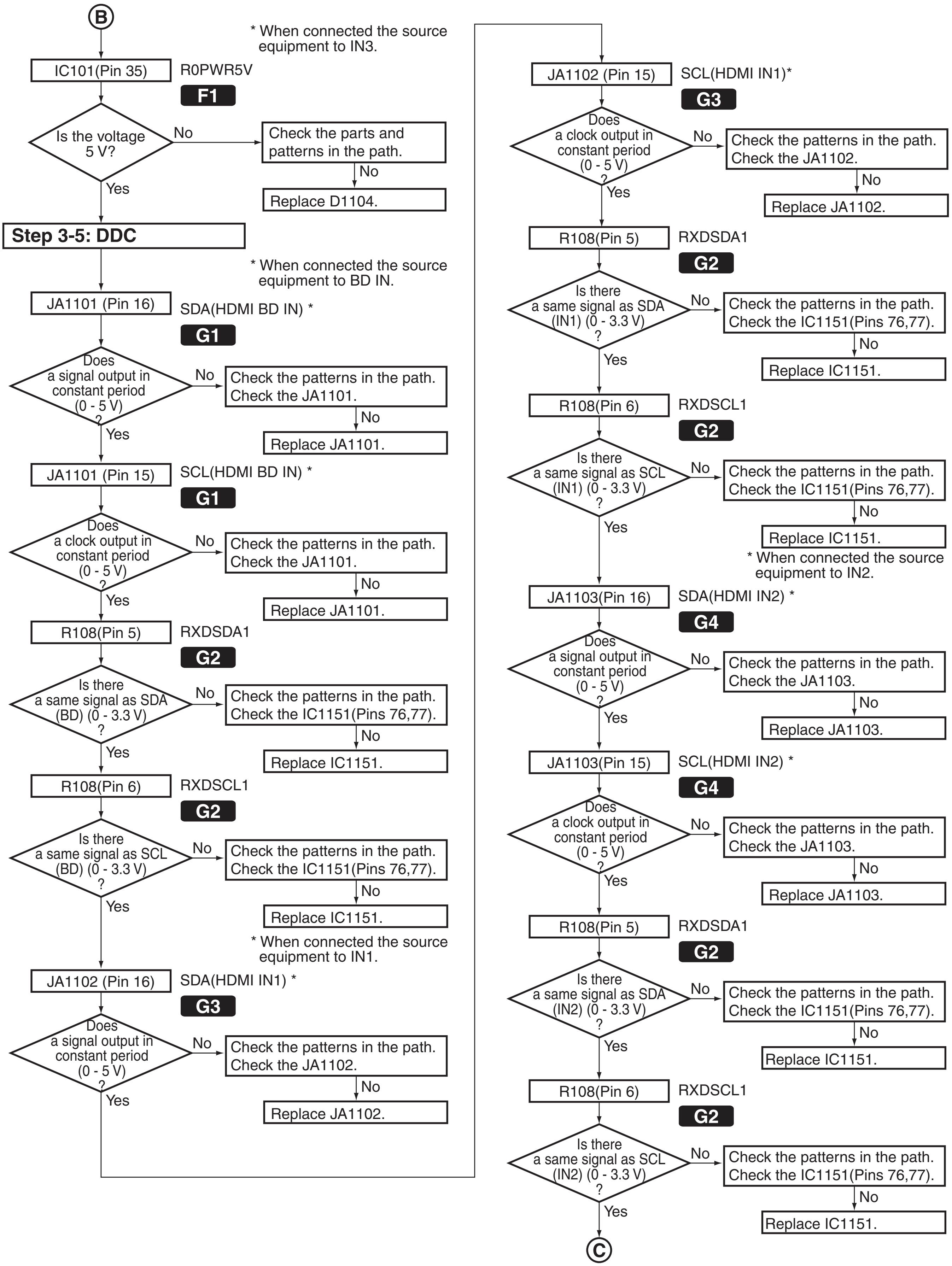
- The parts marked like **A2** in the following chart are located in "HDMI/NETWORK Assy Check Points".

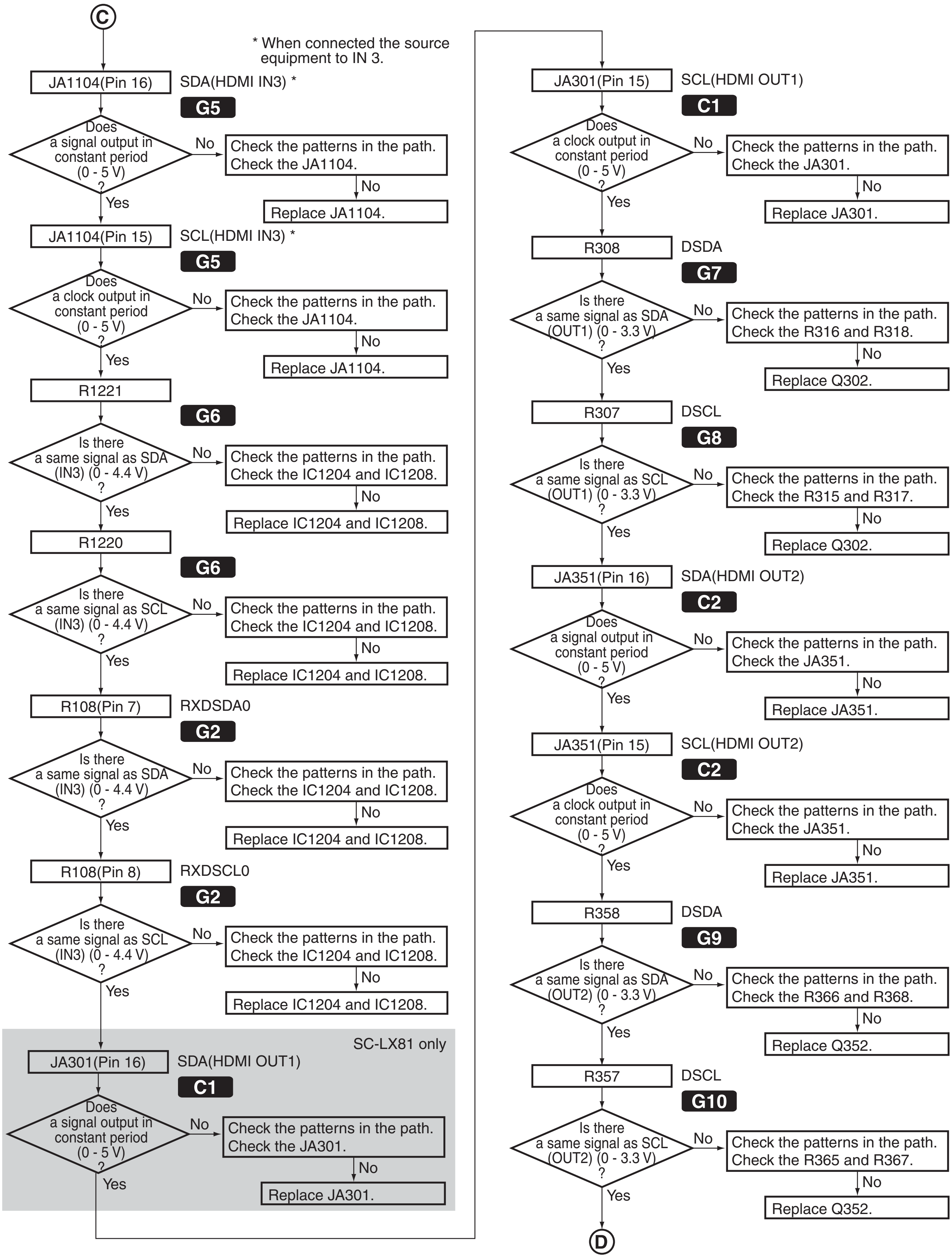

Common section
Step 1: Connections
CN1001 - CN1003, CN201, CN1701, CN601
All Connectors
Is soldering and connections of the connectors OK?
No
Solder the connectors correctly, insert the connectors securely.
Yes
Step 2-1: Power supply, CLK
CN1001(Pin 4)
UNReg INPUT
V+12HDMI
Is the voltage 15.5 V?
No
Diagnosis the INTERFACE Assy.
Yes
R1057
6 V
V+6HD
Is the voltage 6 V?
No
Check the soldering of IC1051 and the peripheries of IC1051. If soldering has not been done correctly, replace IC1051.
Yes
R1082
5 V
V+5DHD
Is the voltage 5 V?
No
Check the soldering of IC1082 and the peripheries of IC1082. If soldering has not been done correctly, replace IC1082.
Yes
R1073
5 V
V+5AHD
Is the voltage 5 V?
No
Check the soldering of IC1071 and the peripheries of IC1071. If soldering has not been done correctly, replace IC1071.
Yes
R1029
3.3 V
V+3R3HD
Is the voltage 3.3 V?
No
Check the soldering of IC1021 and the peripheries of IC1021. If soldering has not been done correctly, replace IC1021.
Yes
R1030
1.8 V
V+1R8HD
Is the voltage 1.8 V?
No
Check the soldering of IC1021 and the peripheries of IC1021. If soldering has not been done correctly, replace IC1021.
Yes
L1901
2.5 V
V+2R5DDR_EM
Is the voltage 2.5 V?
No
Check the soldering of IC1902 and the peripheries of IC1902. If soldering has not been done correctly, replace IC1902.
Yes
L1702
1.5 V
V+1R5D
Is the voltage 1.5 V?
No
Check the soldering of IC1702 and the peripheries of IC1702. If soldering has not been done correctly, replace IC1702.
Yes
R1905
1.25 V
A1
Is the voltage 1.25 V?
No
Check the soldering of IC1903 and the peripheries of IC1903. If soldering has not been done correctly, replace IC1903.
Yes
X501
X'TAL (microcomputer)
B1
Is oscillation of 15.7 MHz ?
No
Check the soldering of X501 or IC501. If soldering has not been done correctly, replace X501 or IC501.
Yes
Step 2-2: Reset
CN1003(Pin 4)
HDRST
B2
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Diagnosis the INTERFACE Assy or D-MOTHER Assy.
Yes
HDMI (HDMI input) diagnosis : To Step 3-1
Scaler diagnosis : To Step 5-1
Video converter (Analog input) diagnosis : To Step 4-1
Scaler diagnosis : To Step 5-1
GUI(EMMA) diagnosis : To Step 6-1
Scaler diagnosis : To Step 5-1

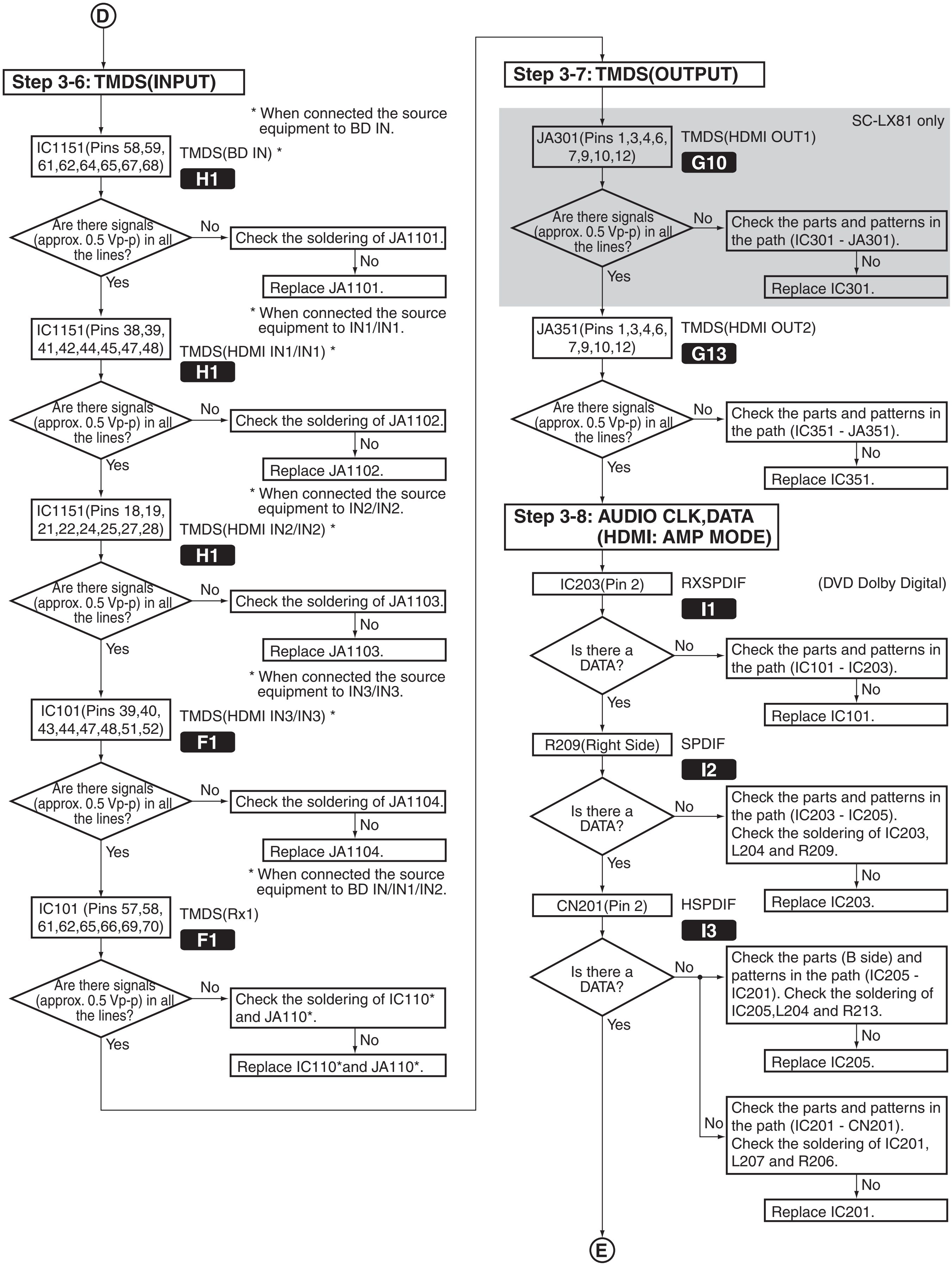
HDMI section

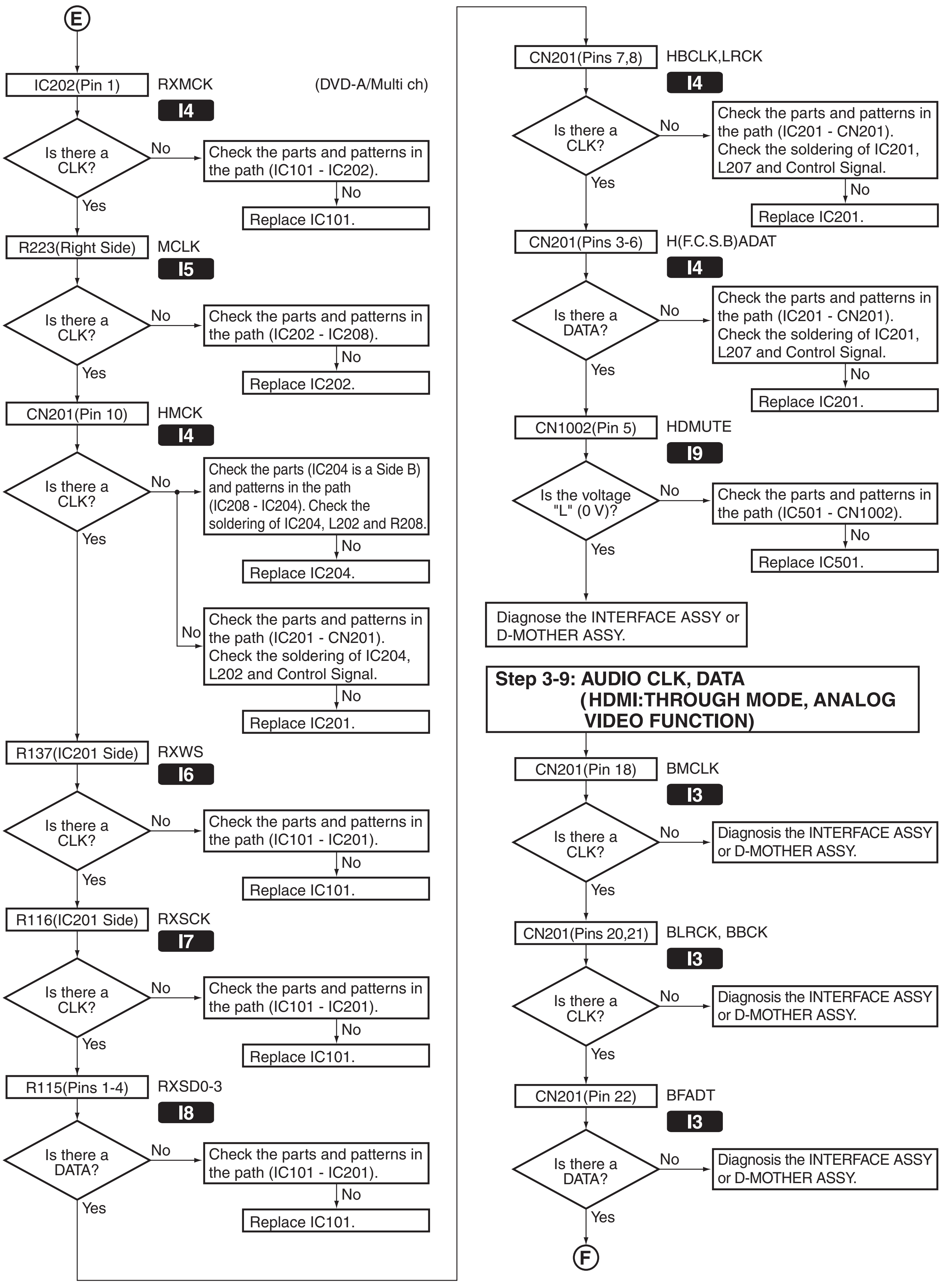

Step 3-1: Power supply, CLK
SC-LX81 only
JA301(Pin 18)
5 V(HDMI OUT1)
C1
Is the voltage 6 V?
No
Check the soldering of IC1051 and the peripheries of IC1051. If soldering has not been done correctly, replace IC1051.
Yes
JA351(Pin 18)
5V(HDMI OUT2/1)
C2
Is the voltage 6 V?
No
Check the soldering of IC1051 and the peripheries of IC1051. If soldering has not been done correctly, replace IC1051.
Yes
D1101
5V(BD IN)
V+5E1
Is the voltage 4.4 V?
No
Replace D1101.
Yes
D1102
5V(HDMI IN1)
V+5E2
Is the voltage 4.4 V?
No
Replace D1102.
Yes
D1103
5V(HDMI IN2)
V+5E3
Is the voltage 4.4 V?
No
Replace D1103.
Yes
D1104
5V(HDMI IN3)
V+5E4
Is the voltage 4.4 V?
No
Replace D1104.
Yes
* HDMI Switch.
L1151
3.3 V(Switch)
V+3R3HD
Is the voltage 3.3 V?
No
Replace L1151.
Yes
* HDMI Switch.
L1152, L1153
1.8 V(Switch)
V+1R8HD
Is the voltage 1.8 V?
No
Replace L1152 and L1153.
Yes
* At BD IN.
IC1151(Pin 72)
5V-1(Switch)
V+5R1
Is the voltage 5 V?
No
Check the connection.
No
Replace JA1101.
Yes
* At HDMI IN1.
IC1151(Pin 52)
5V-2(Switch)
V+5R2
Is the voltage 5 V?
No
Check the connection.
No
Replace JA1101.
Yes
* At HDMI IN2.
IC1151(Pin 32)
5V-3(Switch)
V+5R3
Is the voltage 5 V?
No
Check the connection.
No
Replace JA1101.
Yes
X101
X'TAL(HDMI Rx)
C3
Is oscillation of 28.322 MHz ?
No
Check the soldering of IC101. Check the peripheries of X101.
No
Replace X101 or IC101.
Yes
Step 3-2 : Reset
R564
RXRST
D4
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Replace IC501 or IC502.
Yes
SC-LX81 only
R304
TX1RST
D5
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Replace IC501 or IC502.
Yes
A


A
R354
TX2RST
D6
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Replace IC501 or IC502.
Yes
Step 3-3: Hot Plug Detect
* When connected the source equipment to BD IN.
R1101
HPDET1(BD IN) *
E1
Is the voltage 5 V?
No
Check the patterns in the path. Check the R1113 and R1169.
No
Replace R1113 or R1169.
Yes
* When connected the source equipment to IN1.
R1104
HPDET2(HDMI IN1) *
E2
Is the voltage 5 V?
No
Check the patterns in the path. Check the R1114 and R1151.
No
Replace R1114 or R1151.
Yes
* When connected the source equipment to IN2.
R1107
HPDET3(HDMI IN2) *
E3
Is the voltage 5 V?
No
Check the patterns in the path. Check the R1115 and R1154.
No
Replace R1115 or R1154.
Yes
* When connected the source equipment to IN3.
Q1104 (B)
HPDET4(HDMI IN3) *
E4
Is the voltage 0 V?
No
Check the patterns in the path.
No
Replace IC501.
Yes
R1110
HPD(HDMI IN3) *
E5
Is the voltage 5 V?
No
Check the patterns in the path. Check the Q1104 and R1110.
No
Replace Q1104 or R1110.
Yes
SC-LX81 only
R1057
HPD(HDMI OUT1)
V+6HD
Is the voltage "H" (6 V)?
No
Check the patterns in the path. Check the JA301.
No
Replace JA301.
Yes
R313
HPD(HDMI TX1)
E7
Is the voltage "H" (5 V)?
No
Check the patterns in the path. Check the D301 and R313.
No
Replace D301 or R313.
Yes
R1057
HPD(HDMI OUT2/1)
V+6HD
Is the voltage "H" (6 V)?
No
Check the patterns in the path. Check the JA351.
No
Replace JA351.
Yes
R363
HPD(HDMI Tx2/1)
E9
Is the voltage "H" (5 V)?
No
Check the patterns in the path. Check the D351 and R363.
No
Replace D351 or R363.
Yes
Step 3-4: Source 5V
* When connected the source equipment to BD IN/IN1/IN2.
V+5R(BD IN/HDMI IN1/IN2) *
E1 or E2 or E3
Is the voltage 5 V?
No
Check the JA110*.
No
Replace JA110*and D110*.
Yes
* When connected the source equipment to IN3.
V+5R4(HDMI IN3) *
E5
Is the voltage 5 V?
No
Check the parts and patterns in the path.
No
Replace JA1104 and D1104.
Yes
* When connected the source equipment to BD IN/IN1/IN2.
IC101(Pin 30)
R1PWR5V
F1
Is the voltage 5 V?
No
Check the IC1151.
No
Replace IC1151.
Yes
B


B
* When connected the source equipment to IN3.
IC101(Pin 35)
R0PWR5V
F1
Is the voltage 5 V?
No
Check the parts and patterns in the path.
No
Replace D1104.
Yes
Step 3-5: DDC
* When connected the source equipment to BD IN.
JA1101 (Pin 16)
SDA(HDMI BD IN) *
G1
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1101.
No
Replace JA1101.
Yes
JA1101 (Pin 15)
SCL(HDMI BD IN) *
G1
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1101.
No
Replace JA1101.
Yes
R108(Pin 5)
RXDSDA1
G2
Is there a same signal as SDA (BD) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
R108(Pin 6)
RXDSCL1
G2
Is there a same signal as SCL (BD) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
* When connected the source equipment to IN1.
JA1102 (Pin 16)
SDA(HDMI IN1) *
G3
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1102.
No
Replace JA1102.
Yes
JA1102 (Pin 15)
SCL(HDMI IN1)*
G3
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1102.
No
Replace JA1102.
Yes
R108(Pin 5)
RXDSDA1
G2
Is there a same signal as SDA (IN1) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
R108(Pin 6)
RXDSCL1
G2
Is there a same signal as SCL (IN1) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
* When connected the source equipment to IN2.
JA1103(Pin 16)
SDA(HDMI IN2) *
G4
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1103.
No
Replace JA1103.
Yes
JA1103(Pin 15)
SCL(HDMI IN2) *
G4
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1103.
No
Replace JA1103.
Yes
R108(Pin 5)
RXDSDA1
G2
Is there a same signal as SDA (IN2) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
R108(Pin 6)
RXDSCL1
G2
Is there a same signal as SCL (IN2) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the IC1151(Pins 76,77).
No
Replace IC1151.
Yes
C

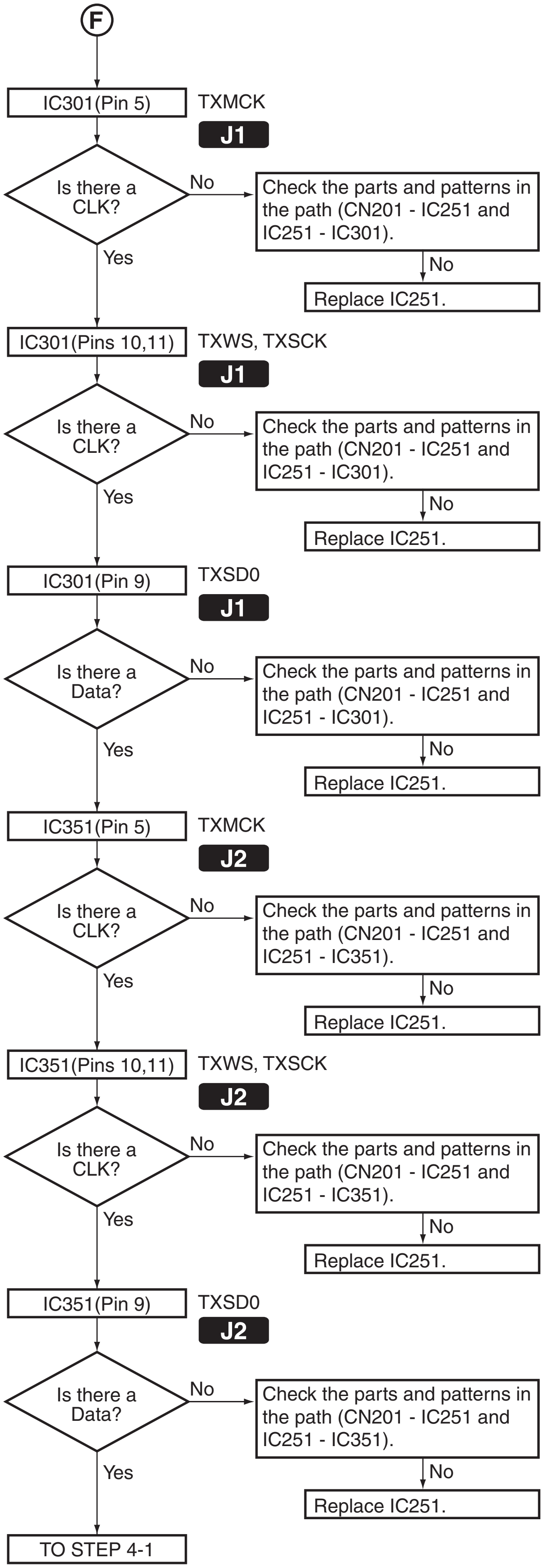

C
* When connected the source equipment to IN 3.
JA1104(Pin 16)
SDA(HDMI IN3) *
G5
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1104.
No
Replace JA1104.
Yes
JA1104(Pin 15)
SCL(HDMI IN3) *
G5
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA1104.
No
Replace JA1104.
Yes
R1221
G6
Is there a same signal as SDA (IN3) (0 - 4.4 V) ?
No
Check the patterns in the path. Check the IC1204 and IC1208.
No
Replace IC1204 and IC1208.
Yes
R1220
G6
Is there a same signal as SCL (IN3) (0 - 4.4 V) ?
No
Check the patterns in the path. Check the IC1204 and IC1208.
No
Replace IC1204 and IC1208.
Yes
R108(Pin 7)
RXDSDA0
G2
Is there a same signal as SDA (IN3) (0 - 4.4 V) ?
No
Check the patterns in the path. Check the IC1204 and IC1208.
No
Replace IC1204 and IC1208.
Yes
R108(Pin 8)
RXDSCL0
G2
Is there a same signal as SCL (IN3) (0 - 4.4 V) ?
No
Check the patterns in the path. Check the IC1204 and IC1208.
No
Replace IC1204 and IC1208.
Yes
SC-LX81 only
JA301(Pin 16)
SDA(HDMI OUT1)
C1
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA301.
No
Replace JA301.
Yes
JA301(Pin 15)
SCL(HDMI OUT1)
C1
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA301.
No
Replace JA301.
Yes
R308
DSDA
G7
Is there a same signal as SDA (OUT1) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the R316 and R318.
No
Replace Q302.
Yes
R307
DSCL
G8
Is there a same signal as SCL (OUT1) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the R315 and R317.
No
Replace Q302.
Yes
JA351(Pin 16)
SDA(HDMI OUT2)
C2
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA351.
No
Replace JA351.
Yes
JA351(Pin 15)
SCL(HDMI OUT2)
C2
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check the JA351.
No
Replace JA351.
Yes
R358
DSDA
G9
Is there a same signal as SDA (OUT2) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the R366 and R368.
No
Replace Q352.
Yes
R357
DSCL
G10
Is there a same signal as SCL (OUT2) (0 - 3.3 V) ?
No
Check the patterns in the path. Check the R365 and R367.
No
Replace Q352.
Yes
D


D
Step 3-6: TMDS(INPUT)
* When connected the source equipment to BD IN.
IC1151(Pins 58,59, 61,62,64,65,67,68)
TMDS(BD IN) *
H1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of JA1101.
No
Replace JA1101.
Yes
* When connected the source equipment to IN1/IN1.
IC1151(Pins 38,39, 41,42,44,45,47,48)
TMDS(HDMI IN1/IN1) *
H1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of JA1102.
No
Replace JA1102.
Yes
* When connected the source equipment to IN2/IN2.
IC1151(Pins 18,19, 21,22,24,25,27,28)
TMDS(HDMI IN2/IN2) *
H1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of JA1103.
No
Replace JA1103.
Yes
* When connected the source equipment to IN3/IN3.
IC101(Pins 39,40, 43,44,47,48,51,52)
TMDS(HDMI IN3/IN3) *
F1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of JA1104.
No
Replace JA1104.
Yes
* When connected the source equipment to BD IN/IN1/IN2.
IC101 (Pins 57,58, 61,62,65,66,69,70)
TMDS(Rx1)
F1
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the soldering of IC110* and JA110*.
No
Replace IC110*and JA110*.
Yes
Step 3-7: TMDS(OUTPUT)
SC-LX81 only
JA301(Pins 1,3,4,6, 7,9,10,12)
TMDS(HDMI OUT1)
G10
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the parts and patterns in the path (IC301 - JA301).
No
Replace IC301.
Yes
JA351(Pins 1,3,4,6, 7,9,10,12)
TMDS(HDMI OUT2)
G13
Are there signals (approx. 0.5 Vp-p) in all the lines?
No
Check the parts and patterns in the path (IC351 - JA351).
No
Replace IC351.
Yes
Step 3-8: AUDIO CLK,DATA (HDMI: AMP MODE)
IC203(Pin 2)
RXSPDIF
(DVD Dolby Digital)
I1
Is there a DATA?
No
Check the parts and patterns in the path (IC101 - IC203).
No
Replace IC101.
Yes
R209(Right Side)
SPDIF
I2
Is there a DATA?
No
Check the parts and patterns in the path (IC203 - IC205). Check the soldering of IC203, L204 and R209.
No
Replace IC203.
Yes
CN201(Pin 2)
HSPDIF
I3
Is there a DATA?
No
Check the parts (B side) and patterns in the path (IC205 - IC201). Check the soldering of IC205,L204 and R213.
No
Replace IC205.
No
Check the parts and patterns in the path (IC201 - CN201). Check the soldering of IC201, L207 and R206.
No
Replace IC201.
Yes
E

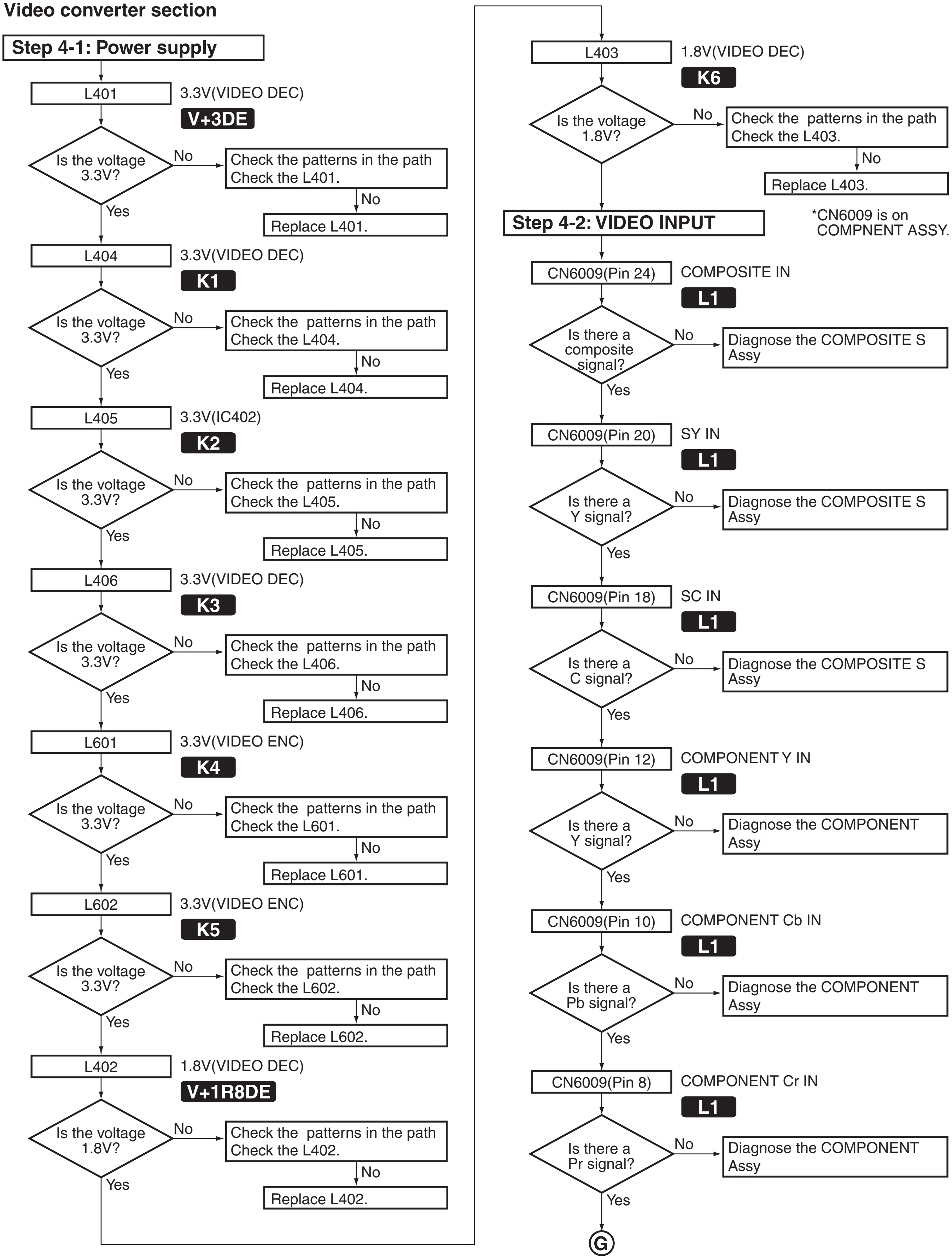

E
IC202(Pin 1)
RXMCK
I4
(DVD-A/Multi ch)
Is there a CLK?
No
Check the parts and patterns in the path (IC101 - IC202).
No
Replace IC101.
Yes
R223(Right Side)
MCLK
I5
Is there a CLK?
No
Check the parts and patterns in the path (IC202 - IC208).
No
Replace IC202.
Yes
CN201(Pin 10)
HMCK
I4
Is there a CLK?
No
Check the parts (IC204 is a Side B) and patterns in the path (IC208 - IC204). Check the soldering of IC204, L202 and R208.
No
Replace IC204.
No
Check the parts and patterns in the path (IC201 - CN201). Check the soldering of IC204, L202 and Control Signal.
No
Replace IC201.
Yes
R137(IC201 Side)
RXWS
I6
Is there a CLK?
No
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
Yes
R116(IC201 Side)
RXSCK
I7
Is there a CLK?
No
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
Yes
R115(Pins 1-4)
RXSD0-3
I8
Is there a DATA?
No
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
Yes
CN201(Pins 7,8)
HBCLK,LRCK
I4
Is there a CLK?
No
Check the parts and patterns in the path (IC201 - CN201). Check the soldering of IC201, L207 and Control Signal.
No
Replace IC201.
Yes
CN201(Pins 3-6)
H(F.C.S.B)ADAT
I4
Is there a DATA?
No
Check the parts and patterns in the path (IC201 - CN201). Check the soldering of IC201, L207 and Control Signal.
No
Replace IC201.
Yes
CN1002(Pin 5)
HDMUTE
I9
Is the voltage "L" (0 V)?
No
Check the parts and patterns in the path (IC501 - CN1002).
No
Replace IC501.
Yes
Diagnose the INTERFACE ASSY or D-MOTHER ASSY.

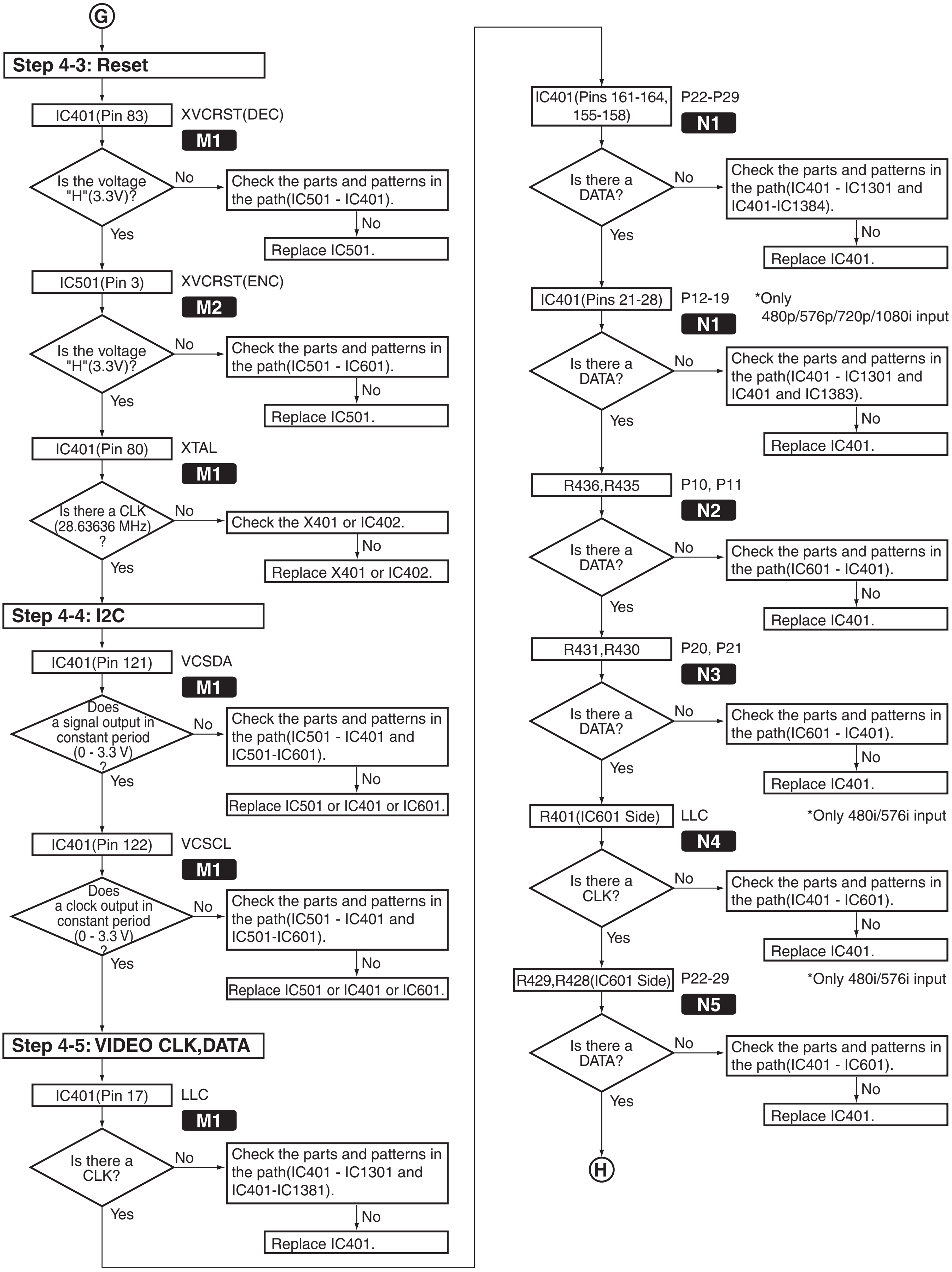
Step 3-9: AUDIO CLK, DATA (HDMI:THROUGH MODE, ANALOG VIDEO FUNCTION)

CN201(Pin 18)
BMCLK
I3
Is there a CLK?
No
Diagnosis the INTERFACE ASSY or D-MOTHER ASSY.
Yes
CN201(Pins 20,21)
BLRCK, BBCK
I3
Is there a CLK?
No
Diagnosis the INTERFACE ASSY or D-MOTHER ASSY.
Yes
CN201(Pin 22)
BFADT
I3
Is there a DATA?
No
Diagnosis the INTERFACE ASSY or D-MOTHER ASSY.
Yes
F


F
IC301(Pin 5)
TXMCK
J1
Is there a CLK?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC301).
No
Replace IC251.
Yes
IC301(Pins 10,11)
TXWS, TXSCK
J1
Is there a CLK?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC301).
No
Replace IC251.
Yes
IC301(Pin 9)
TXSD0
J1
Is there a Data?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC301).
No
Replace IC251.
Yes
IC351(Pin 5)
TXMCK
J2
Is there a CLK?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC351).
No
Replace IC251.
Yes
IC351(Pins 10,11)
TXWS, TXSCK
J2
Is there a CLK?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC351).
No
Replace IC251.
Yes
IC351(Pin 9)
TXSD0
J2
Is there a Data?
No
Check the parts and patterns in the path (CN201 - IC251 and IC251 - IC351).
No
Replace IC251.
Yes
TO STEP 4-1

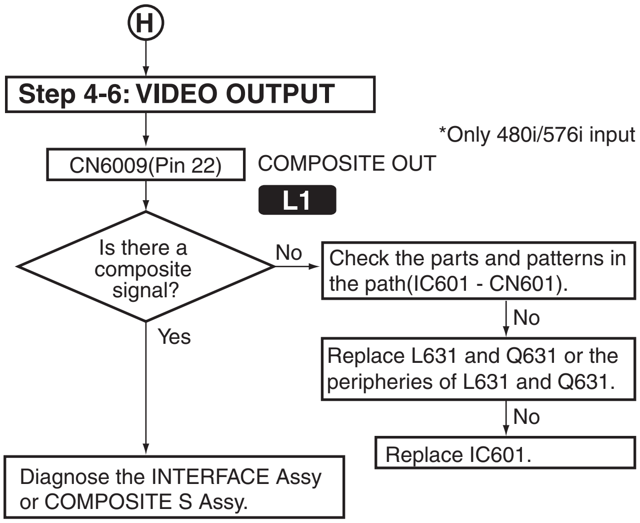
Video converter section

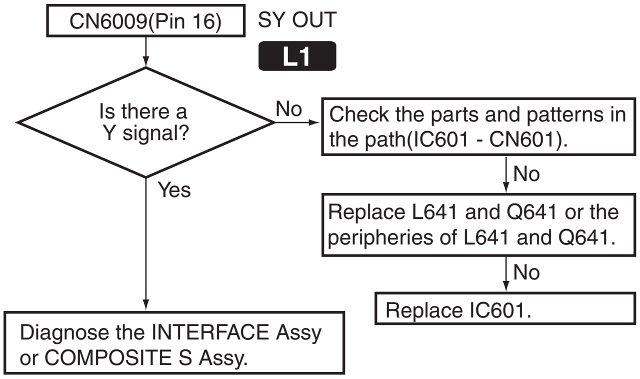

Step 4-1: Power supply
L401
3.3V(VIDEO DEC)
V+3DE
Is the voltage 3.3V?
No
Check the patterns in the path Check the L401.
No
Replace L401.
Yes
L404
3.3V(VIDEO DEC)
K1
Is the voltage 3.3V?
No
Check the patterns in the path Check the L404.
No
Replace L404.
Yes
L405
3.3V(IC402)
K2
Is the voltage 3.3V?
No
Check the patterns in the path Check the L405.
No
Replace L405.
Yes
L406
3.3V(VIDEO DEC)
K3
Is the voltage 3.3V?
No
Check the patterns in the path Check the L406.
No
Replace L406.
Yes
L601
3.3V(VIDEO ENC)
K4
Is the voltage 3.3V?
No
Check the patterns in the path Check the L601.
No
Replace L601.
Yes
L602
3.3V(VIDEO ENC)
K5
Is the voltage 3.3V?
No
Check the patterns in the path Check the L602.
No
Replace L602.
Yes
L402
1.8V(VIDEO DEC)
V+1R8DE
Is the voltage 1.8V?
No
Check the patterns in the path Check the L402.
No
Replace L402.
Yes
L403
1.8V(VIDEO DEC)
K6
Is the voltage 1.8V?
No
Check the patterns in the path Check the L403.
No
Replace L403.
Step 4-2: VIDEO INPUT
*CN6009 is on COMPNENT ASSY.
CN6009(Pin 24)
COMPOSITE IN
L1
Is there a composite signal?
No
Diagnose the COMPOSITE S Assy
Yes
CN6009(Pin 20)
SY IN
L1
Is there a Y signal?
No
Diagnose the COMPOSITE S Assy
Yes
CN6009(Pin 18)
SC IN
L1
Is there a C signal?
No
Diagnose the COMPOSITE S Assy
Yes
CN6009(Pin 12)
COMPONENT Y IN
L1
Is there a Y signal?
No
Diagnose the COMPONENT Assy
Yes
CN6009(Pin 10)
COMPONENT Cb IN
L1
Is there a Pb signal?
No
Diagnose the COMPONENT Assy
Yes
CN6009(Pin 8)
COMPONENT Cr IN
L1
Is there a Pr signal?
No
Diagnose the COMPONENT Assy
Yes
G

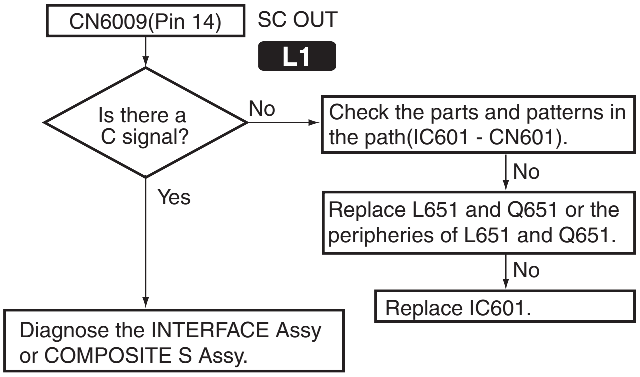

G
Step 4-3: Reset
IC401(Pin 83)
XVCRST(DEC)
M1
Is the voltage "H"(3.3V)?
No
Check the parts and patterns in the path(IC501 - IC401).
No
Replace IC501.
Yes
IC501(Pin 3)
XVCRST(ENC)
M2
Is the voltage "H"(3.3V)?
No
Check the parts and patterns in the path(IC501 - IC601).
No
Replace IC501.
Yes
IC401(Pin 80)
XTAL
M1
Is there a CLK (28.63636 MHz) ?
No
Check the X401 or IC402.
No
Replace X401 or IC402.
Yes
Step 4-4: I2C
IC401(Pin 121)
VCSDA
M1
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC401 and IC501-IC601).
No
Replace IC501 or IC401 or IC601.
Yes
IC401(Pin 122)
VCSCL
M1
Does a clock output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC401 and IC501-IC601).
No
Replace IC501 or IC401 or IC601.
Yes
Step 4-5: VIDEO CLK,DATA
IC401(Pin 17)
LLC
M1
Is there a CLK?
No
Check the parts and patterns in the path(IC401 - IC1301 and IC401-IC1381).
No
Replace IC401.
Yes
IC401(Pins 161-164, 155-158)
P22-P29
N1
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC1301 and IC401-IC1384).
No
Replace IC401.
Yes
IC401(Pins 21-28)
P12-19
*Only 480p/576p/720p/1080i input
N1
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC1301 and IC401 and IC1383).
No
Replace IC401.
Yes
R436,R435
P10, P11
N2
Is there a DATA?
No
Check the parts and patterns in the path(IC601 - IC401).
No
Replace IC401.
Yes
R431,R430
P20, P21
N3
Is there a DATA?
No
Check the parts and patterns in the path(IC601 - IC401).
No
Replace IC401.
Yes
R401(IC601 Side)
LLC
*Only 480i/576i input
N4
Is there a CLK?
No
Check the parts and patterns in the path(IC401 - IC601).
No
Replace IC401.
Yes
R429,R428(IC601 Side)
P22-29
*Only 480i/576i input
N5
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC601).
No
Replace IC401.
Yes
H

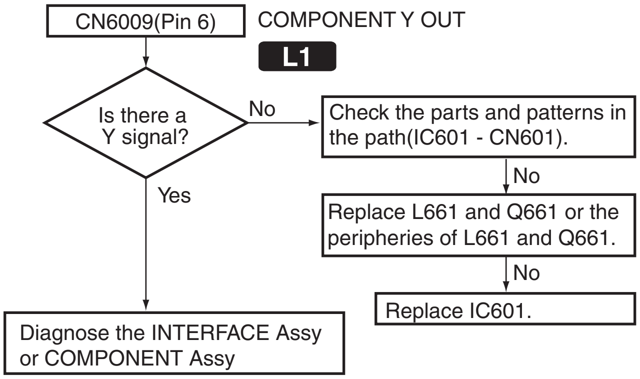
Step 4-6: VIDEO OUTPUT

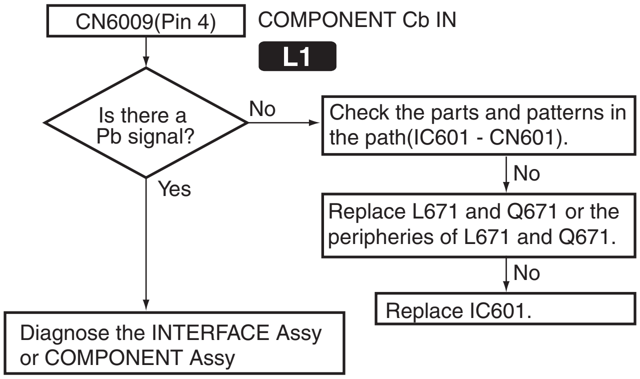
*Only 480i/576i input

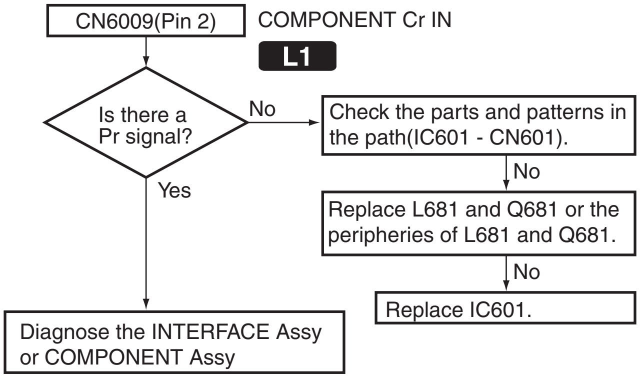

H
CN6009(Pin 22)
COMPOSITE OUT
L1
Is there a composite signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L631 and Q631 or the peripheries of L631 and Q631.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPOSITE S Assy.


CN6009(Pin 16)
SY OUT
L1
Is there a Y signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L641 and Q641 or the peripheries of L641 and Q641.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPOSITE S Assy.

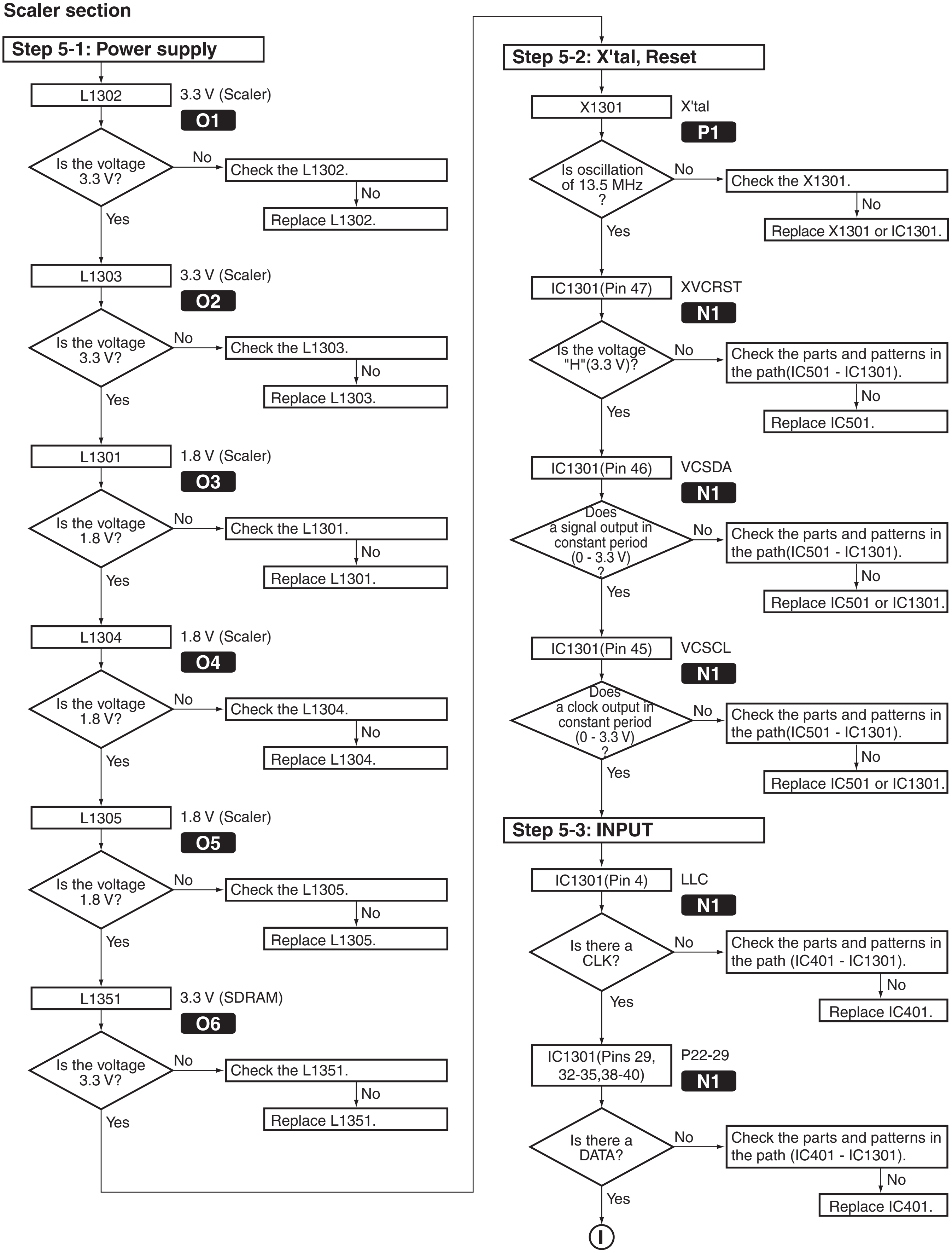

CN6009(Pin 14)
SC OUT
L1
Is there a C signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L651 and Q651 or the peripheries of L651 and Q651.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPOSITE S Assy.

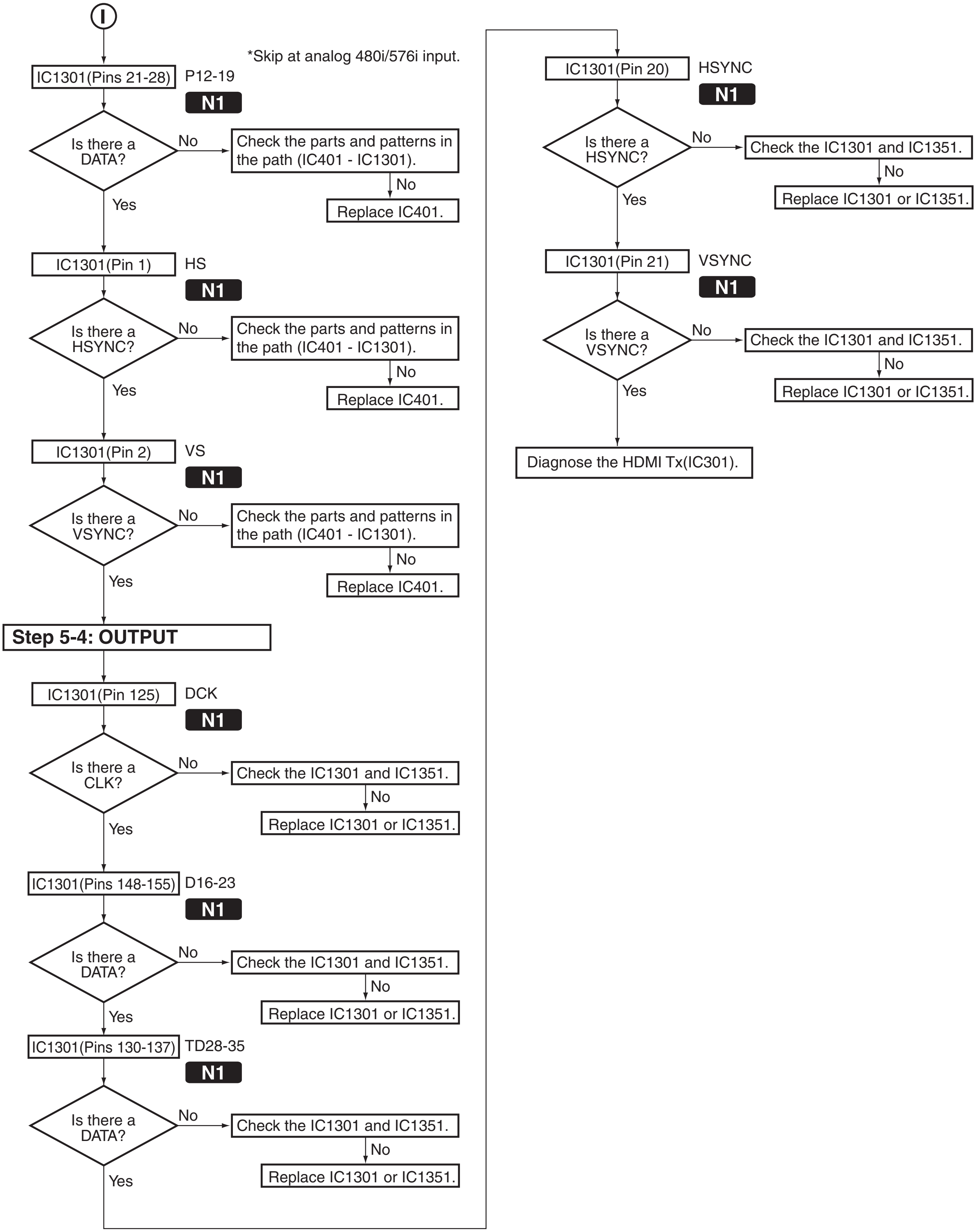

CN6009(Pin 6)
COMPONENT Y OUT
L1
Is there a Y signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L661 and Q661 or the peripheries of L661 and Q661.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPONENT Assy


CN6009(Pin 4)
COMPONENT Cb IN
L1
Is there a Pb signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L671 and Q671 or the peripheries of L671 and Q671.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPONENT Assy

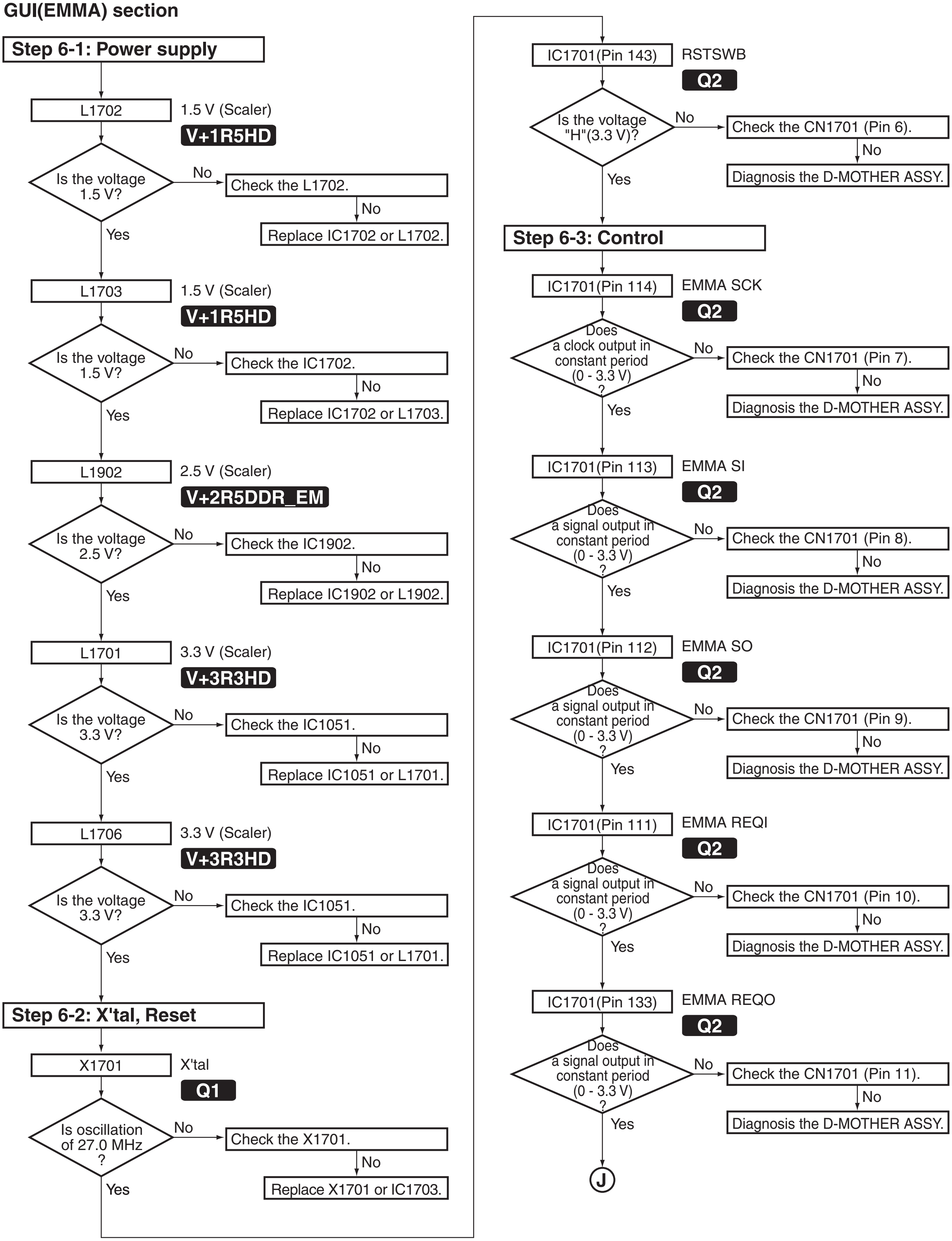

CN6009(Pin 2)
COMPONENT Cr IN
L1
Is there a Pr signal?
No
Check the parts and patterns in the path(IC601 - CN601).
No
Replace L681 and Q681 or the peripheries of L681 and Q681.
No
Replace IC601.
Yes
Diagnose the INTERFACE Assy or COMPONENT Assy

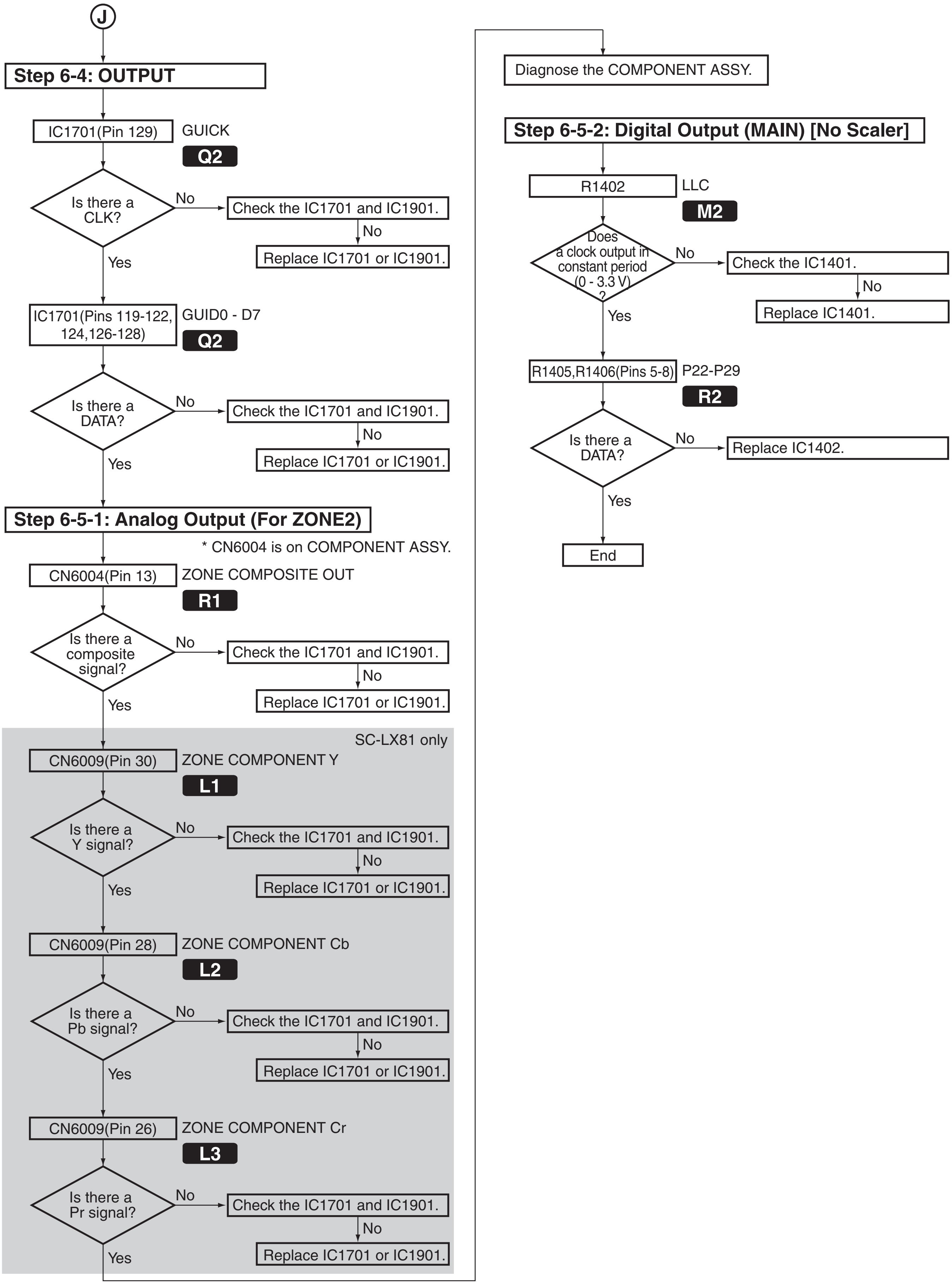
Scaler section


Step 5-1: Power supply
L1302
3.3 V (Scaler)
O1
Is the voltage 3.3 V?
No
Check the L1302.
No
Replace L1302.
Yes
L1303
3.3 V (Scaler)
O2
Is the voltage 3.3 V?
No
Check the L1303.
No
Replace L1303.
Yes
L1301
1.8 V (Scaler)
O3
Is the voltage 1.8 V?
No
Check the L1301.
No
Replace L1301.
Yes
L1304
1.8 V (Scaler)
O4
Is the voltage 1.8 V?
No
Check the L1304.
No
Replace L1304.
Yes
L1305
1.8 V (Scaler)
O5
Is the voltage 1.8 V?
No
Check the L1305.
No
Replace L1305.
Yes
L1351
3.3 V (SDRAM)
O6
Is the voltage 3.3 V?
No
Check the L1351.
No
Replace L1351.
Yes
Step 5-2: X'tal, Reset
X1301
X'tal
P1
Is oscillation of 13.5 MHz ?
No
Check the X1301.
No
Replace X1301 or IC1301.
Yes
IC1301(Pin 47)
XVCRST
N1
Is the voltage "H"(3.3 V)?
No
Check the parts and patterns in the path(IC501 - IC1301).
No
Replace IC501.
Yes
IC1301(Pin 46)
VCSDA
N1
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC1301).
No
Replace IC501 or IC1301.
Yes
IC1301(Pin 45)
VCSCL
N1
Does a clock output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC1301).
No
Replace IC501 or IC1301.
Yes
Step 5-3: INPUT
IC1301(Pin 4)
LLC
N1
Is there a CLK?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
IC1301(Pins 29, 32-35,38-40)
P22-29
N1
Is there a DATA?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
I


I
*Skip at analog 480i/576i input.
IC1301(Pins 21-28)
P12-19
N1
Is there a DATA?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
IC1301(Pin 1)
HS
N1
Is there a HSYNC?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
IC1301(Pin 2)
VS
N1
Is there a VSYNC?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
Step 5-4: OUTPUT
IC1301(Pin 125)
DCK
N1
Is there a CLK?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pins 148-155)
D16-23
N1
Is there a DATA?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pins 130-137)
TD28-35
N1
Is there a DATA?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pin 20)
HSYNC
N1
Is there a HSYNC?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pin 21)
VSYNC
N1
Is there a VSYNC?
No
Check the IC1301 and IC1351.
No
Replace IC1301 or IC1351.
Yes
Diagnose the HDMI Tx(IC301).

GUI(EMMA) section

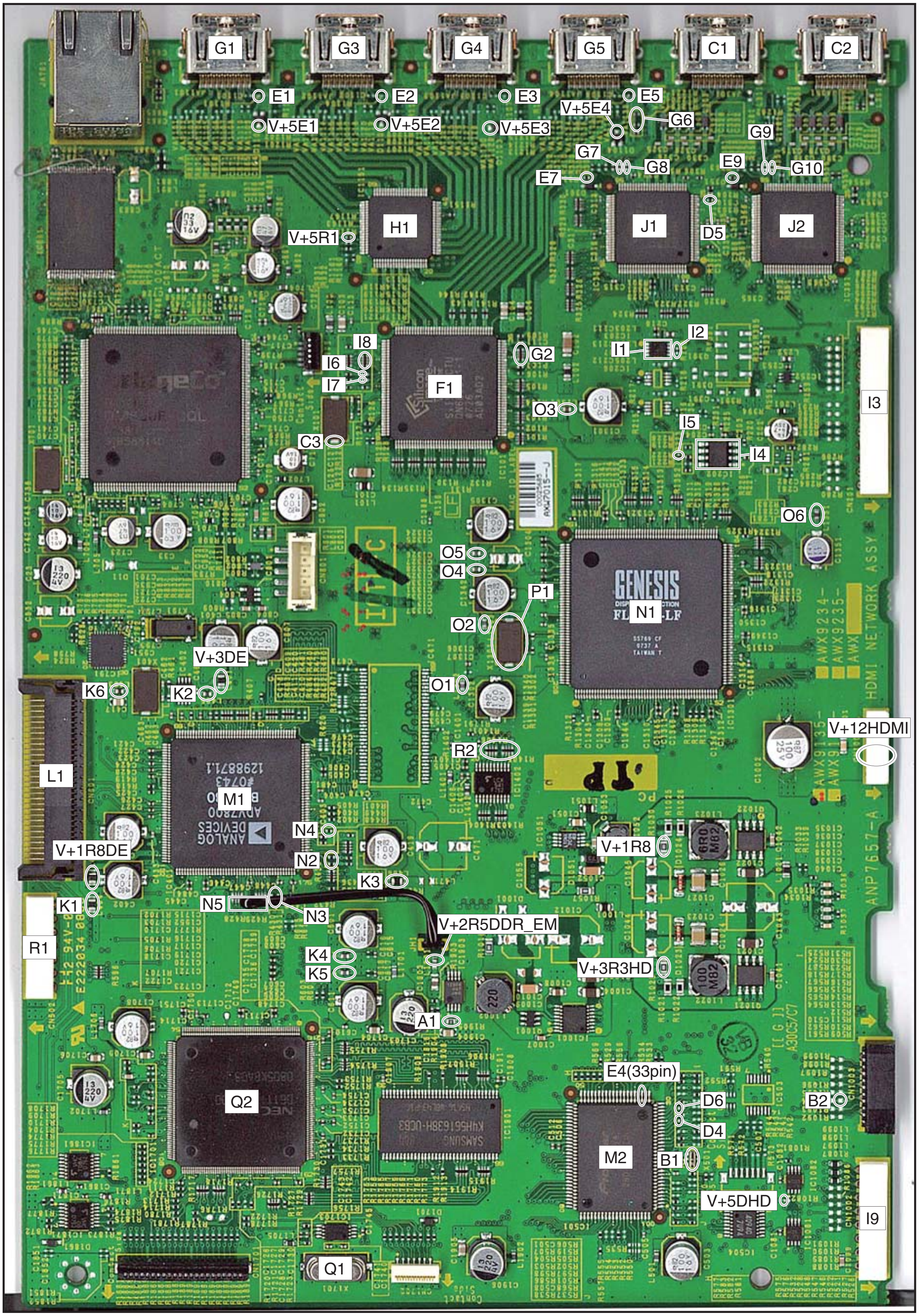

Step 6-1: Power supply
L1702
1.5 V (Scaler)
V+1R5HD
Is the voltage 1.5 V?
No
Check the L1702.
No
Replace IC1702 or L1702.
Yes
L1703
1.5 V (Scaler)
V+1R5HD
Is the voltage 1.5 V?
No
Check the IC1702.
No
Replace IC1702 or L1703.
Yes
L1902
2.5 V (Scaler)
V+2R5DDR_EM
Is the voltage 2.5 V?
No
Check the IC1902.
No
Replace IC1902 or L1902.
Yes
L1701
3.3 V (Scaler)
V+3R3HD
Is the voltage 3.3 V?
No
Check the IC1051.
No
Replace IC1051 or L1701.
Yes
L1706
3.3 V (Scaler)
V+3R3HD
Is the voltage 3.3 V?
No
Check the IC1051.
No
Replace IC1051 or L1701.
Yes
Step 6-2: X'tal, Reset
X1701
X'tal
Q1
Is oscillation of 27.0 MHz ?
No
Check the X1701.
No
Replace X1701 or IC1703.
Yes
IC1701(Pin 143)
RSTSWB
Q2
Is the voltage "H"(3.3 V)?
No
Check the CN1701 (Pin 6).
No
Diagnosis the D-MOTHER ASSY.
Yes
Step 6-3: Control
IC1701(Pin 114)
EMMA SCK
Q2
Does a clock output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 7).
No
Diagnosis the D-MOTHER ASSY.
Yes
IC1701(Pin 113)
EMMA SI
Q2
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 8).
No
Diagnosis the D-MOTHER ASSY.
Yes
IC1701(Pin 112)
EMMA SO
Q2
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 9).
No
Diagnosis the D-MOTHER ASSY.
Yes
IC1701(Pin 111)
EMMA REQI
Q2
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 10).
No
Diagnosis the D-MOTHER ASSY.
Yes
IC1701(Pin 133)
EMMA REQO
Q2
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the CN1701 (Pin 11).
No
Diagnosis the D-MOTHER ASSY.
Yes
J


J
Step 6-4: OUTPUT
IC1701(Pin 129)
GUICK
Q2
Is there a CLK?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
IC1701(Pins 119-122, 124,126-128)
GUID0 - D7
Q2
Is there a DATA?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
Step 6-5-1: Analog Output (For ZONE2)
* CN6004 is on COMPONENT ASSY.
CN6004(Pin 13)
ZONE COMPOSITE OUT
R1
Is there a composite signal?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
SC-LX81 only
CN6009(Pin 30)
ZONE COMPONENT Y
L1
Is there a Y signal?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
CN6009(Pin 28)
ZONE COMPONENT Cb
L2
Is there a Pb signal?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
CN6009(Pin 26)
ZONE COMPONENT Cr
L3
Is there a Pr signal?
No
Check the IC1701 and IC1901.
No
Replace IC1701 or IC1901.
Yes
Diagnose the COMPONENT ASSY.
Step 6-5-2: Digital Output (MAIN) [No Scaler]
R1402
LLC
M2
Does a clock output in constant period (0 - 3.3 V) ?
No
Check the IC1401.
No
Replace IC1401.
Yes
R1405,R1406(Pins 5-8)
P22-P29
R2
Is there a DATA?
No
Replace IC1402.
Yes
End

1) HDMI NETWORK Assy check points

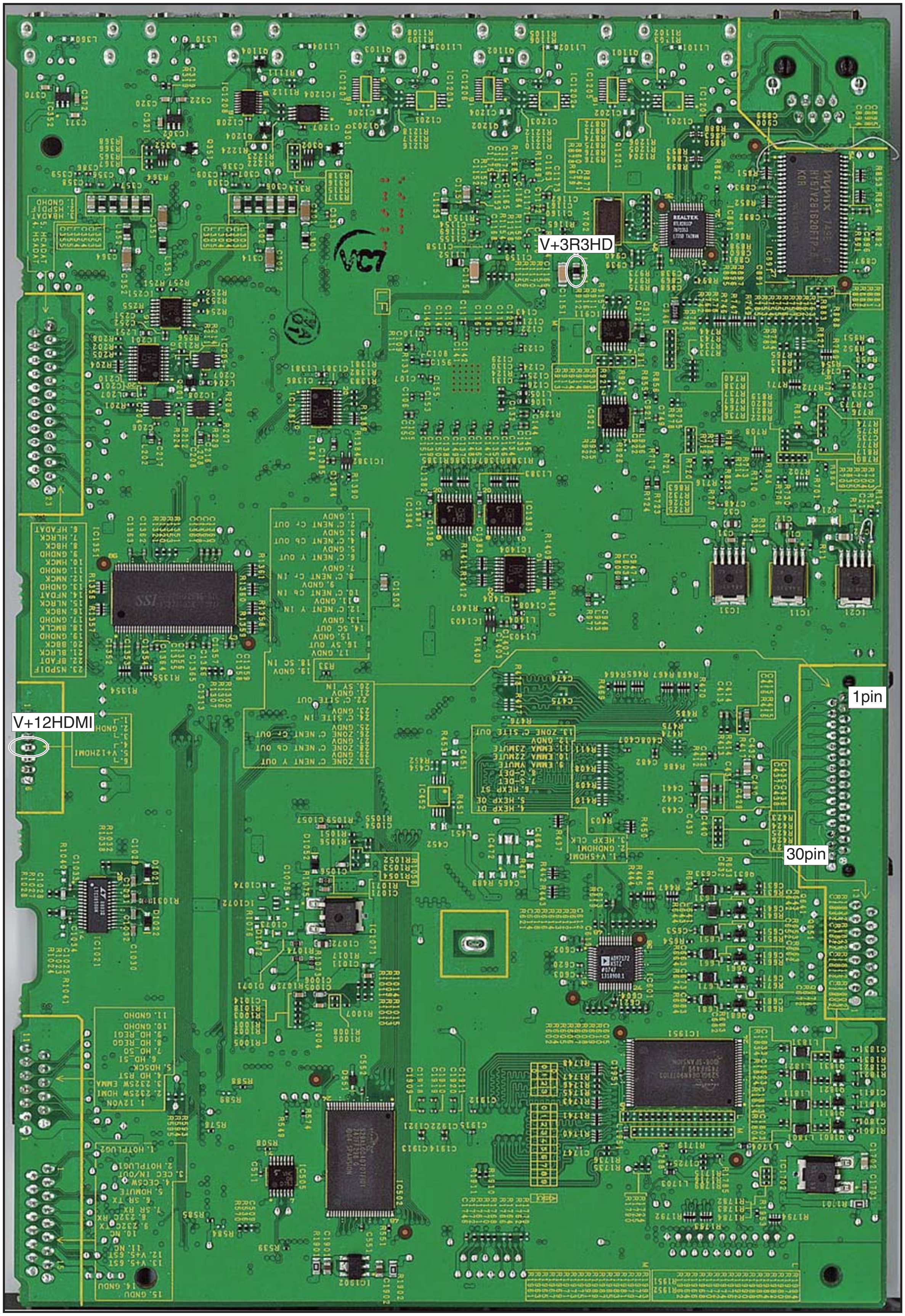
E HDMI NETWORK ASSY

SIDE A


G1
G3
G4
G5
C1
C2
E1
E2
E3
E5
V+5E1
V+5E2
V+5E3
V+5E4
G6
G9
G7
G8
E9
G10
E7
H1
V+5R1
J1
D5
J2
I8
I6
I7
F1
G2
I1
I2
I3
O3
I5
I4
C3
O6
O5
O4
P1
O2
N1
V+3DE
O1
K6
K2
V+12HDMI
R2
L1
M1
N4
V+1R8
V+1R8DE
N2
K3
K1
N5
N3
V+2R5DDR_EM
R1
K4
K5
V+3R3HD
A1
E4(33pin)
D6
B2
Q2
D4
M2
B1
V+5DHD
I9
Q1

E HDMI NETWORK ASSY

SIDE B


V+3R3HD
V+12HDMI
1pin
30pin

[4] Diagnosis of The Network Block

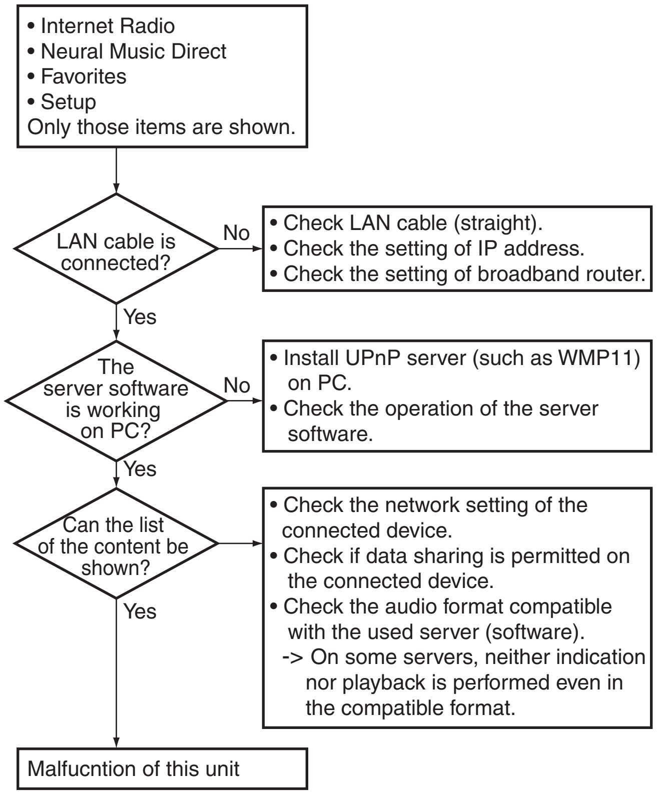
1) Constitution of network function

CD --- ..... -- HDMI4 ---- HOME MEDIA GALLERY --

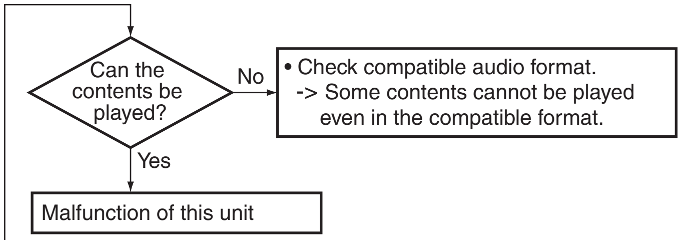
- USB
- Internet Radio
- Neural Music Direct -> Internet radio run by Neural
- Server1
- Server2
- Server3
- Favorites
- Setup
  - Information
    - Firmware Version -> Indicates the version of the firmware.
    - MAC Address -> Indicates MAC Address.
    - IP Address -> Indicates IP Address.
    - Gateway IP -> Indicates Gateway IP.
    - Proxy Server -> Indicates if Proxy Server is valid or invalid.
    - Subnet Mask -> Indicates Subnet Mask.
  - Network Setup

2) Flow chart for isolation of network malfunction

<Network connection>

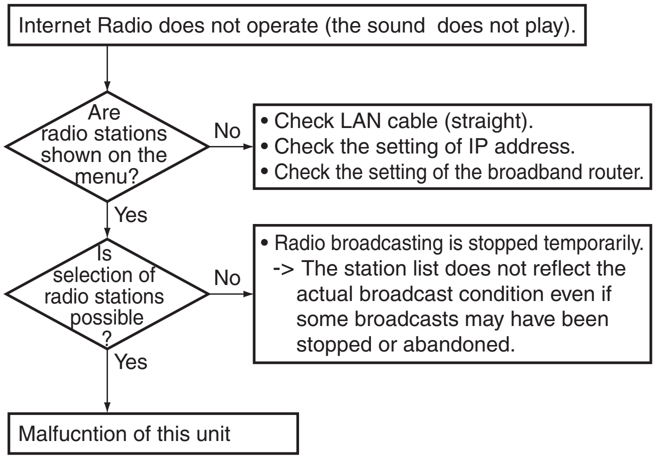


• Internet Radio
• Neural Music Direct
• Favorites
• Setup
Only those items are shown.
LAN cable is connected?
No
• Check LAN cable (straight).
• Check the setting of IP address.
• Check the setting of broadband router.
Yes
The server software is working on PC?
No
• Install UPnP server (such as WMP11) on PC.
• Check the operation of the server software.
Yes
Can the list of the content be shown?
• Check the network setting of the connected device.
• Check if data sharing is permitted on the connected device.
• Check the audio format compatible with the used server (software).
-> On some servers, neither indication nor playback is performed even in the compatible format.
Yes
Malfucntion of this unit



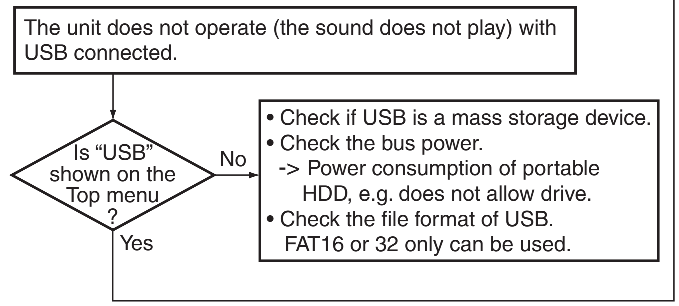
Can the contents be played?
No
• Check compatible audio format.
-> Some contents cannot be played even in the compatible format.
Yes
Malfunction of this unit

<Internet Radio connection>
(Neural Music Direct is the same.)



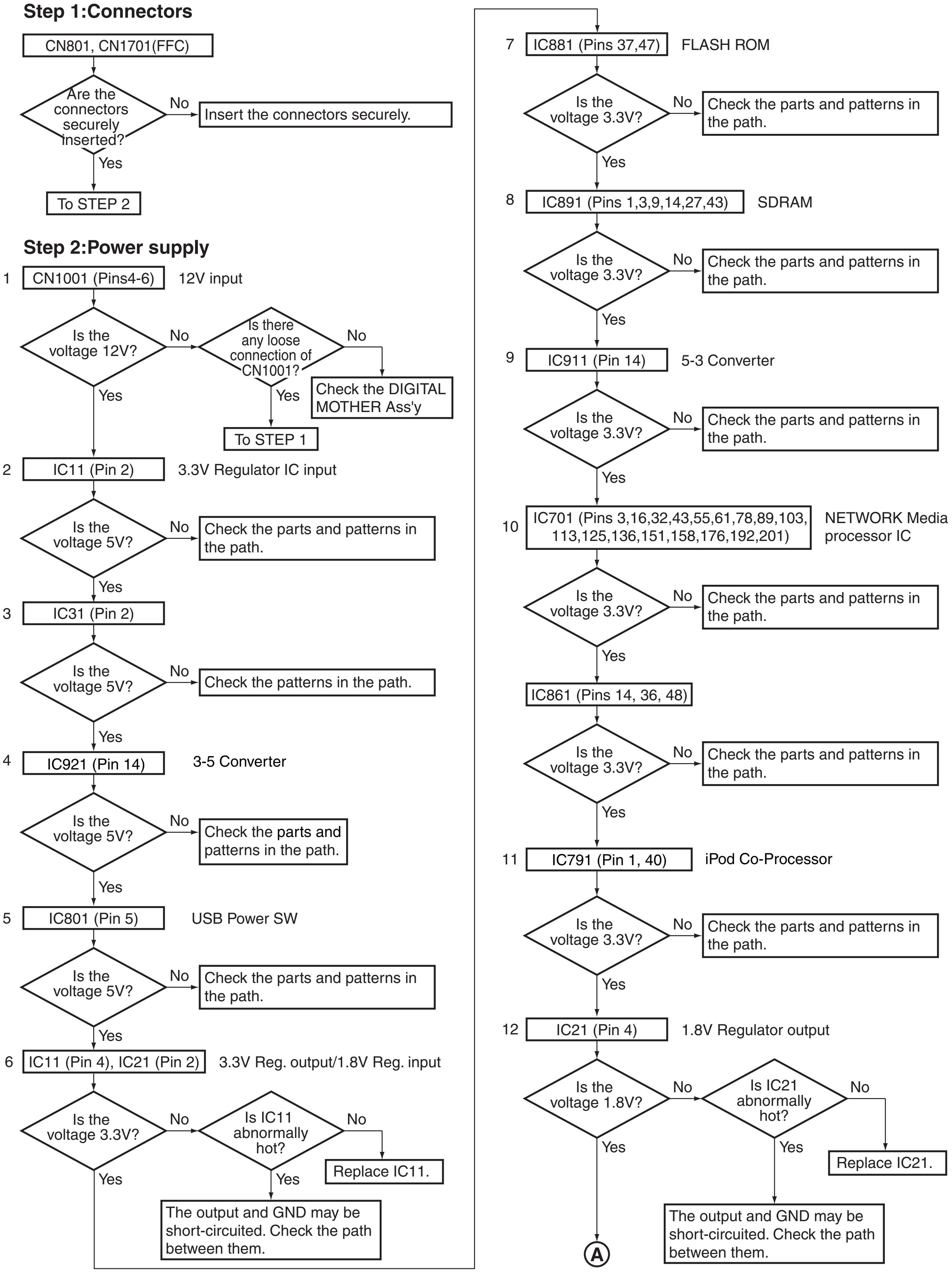
Internet Radio does not operate (the sound does not play).
Are radio stations shown on the menu?
No
• Check LAN cable (straight).
• Check the setting of IP address.
• Check the setting of the broadband router.
Yes
Is selection of radio stations possible ?
No
• Radio broadcasting is stopped temporarily.
-> The station list does not reflect the actual broadcast condition even if some broadcasts may have been stopped or abandoned.
Yes
Malfucntion of this unit

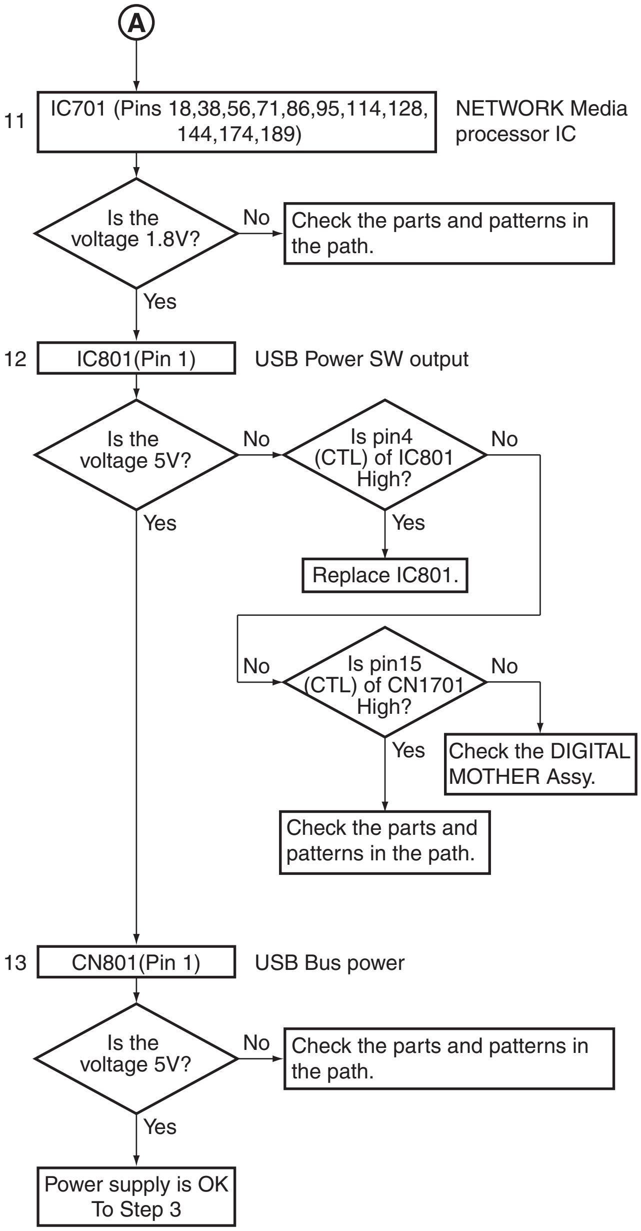
<USB connection>



The unit does not operate (the sound does not play) with USB connected.
Is "USB" shown on the Top menu ?
No
• Check if USB is a mass storage device.
• Check the bus power.
-> Power consumption of portable HDD, e.g. does not allow drive.
• Check the file format of USB.
FAT16 or 32 only can be used.
Yes

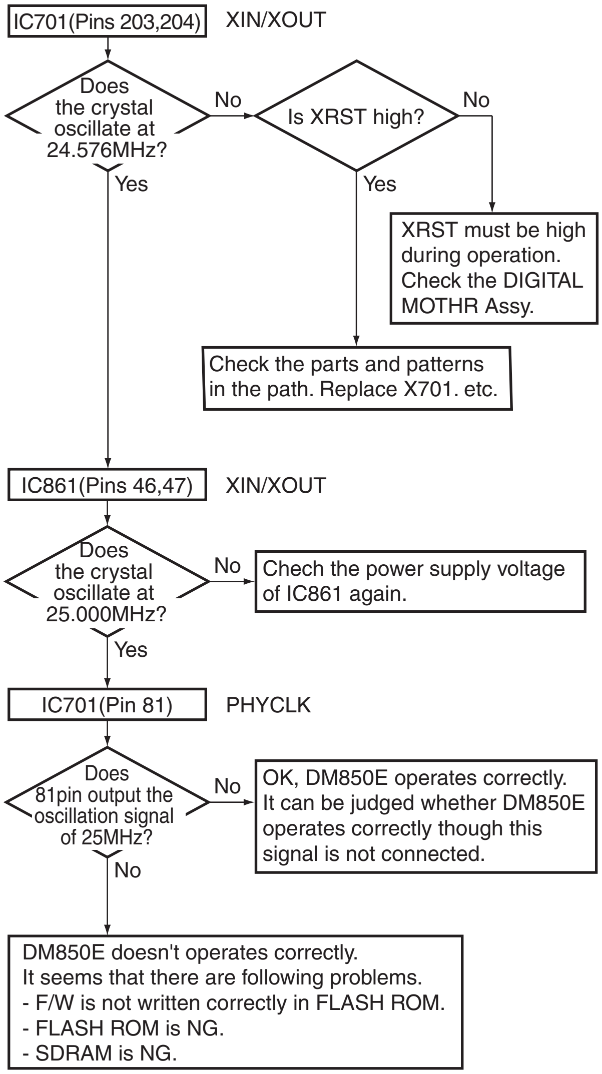
3) Network block troubleshooting


Step 1:Connectors
CN801, CN1701(FFC)
Are the connectors securely inserted?
No
Insert the connectors securely.
Yes
To STEP 2
Step 2:Power supply
1
CN1001 (Pins4-6)
12V input
Is the voltage 12V?
No
Is there any loose connection of CN1001?
No
Check the DIGITAL MOTHER Ass'y
Yes
To STEP 1
Yes
2
IC11 (Pin 2)
3.3V Regulator IC input
Is the voltage 5V?
No
Check the parts and patterns in the path.
Yes
3
IC31 (Pin 2)
Is the voltage 5V?
No
Check the patterns in the path.
Yes
4
IC921 (Pin 14)
3-5 Converter
Is the voltage 5V?
No
Check the parts and patterns in the path.
Yes
5
IC801 (Pin 5)
USB Power SW
Is the voltage 5V?
No
Check the parts and patterns in the path.
Yes
6
IC11 (Pin 4), IC21 (Pin 2)
3.3V Reg. output/1.8V Reg. input
Is the voltage 3.3V?
No
Is IC11 abnormally hot?
No
Replace IC11.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
7
IC881 (Pins 37,47)
FLASH ROM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
8
IC891 (Pins 1,3,9,14,27,43)
SDRAM
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
9
IC911 (Pin 14)
5-3 Converter
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
10
IC701 (Pins 3,16,32,43,55,61,78,89,103, 113,125,136,151,158,176,192,201)
NETWORK Media processor IC
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
IC861 (Pins 14, 36, 48)
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
11
IC791 (Pin 1, 40)
iPod Co-Processor
Is the voltage 3.3V?
No
Check the parts and patterns in the path.
Yes
12
IC21 (Pin 4)
1.8V Regulator output
Is the voltage 1.8V?
No
Is IC21 abnormally hot?
No
Replace IC21.
Yes
The output and GND may be short-circuited. Check the path between them.
Yes
A


A
11
IC701 (Pins 18,38,56,71,86,95,114,128, 144,174,189)
NETWORK Media processor IC
Is the voltage 1.8V?
No
Check the parts and patterns in the path.
Yes
12
IC801(Pin 1)
USB Power SW output
Is the voltage 5V?
No
Is pin4 (CTL) of IC801 High?
No
Yes
Yes
Replace IC801.
No
Is pin15 (CTL) of CN1701 High?
No
Yes
Check the DIGITAL MOTHER Assy.
Check the parts and patterns in the path.
13
CN801(Pin 1)
USB Bus power
Is the voltage 5V?
No
Check the parts and patterns in the path.
Yes
Power supply is OK To Step 3

Step 3:Operation of Network Media processor IC

*Please confirm it with the USB memory connected for the content.


IC701(Pins 203,204)
XIN/XOUT
Does the crystal oscillate at 24.576MHz?
No
Is XRST high?
No
Yes
Yes
XRST must be high during operation. Check the DIGITAL MOTHR Assy.
Check the parts and patterns in the path. Replace X701. etc.
IC861(Pins 46,47)
XIN/XOUT
Does the crystal oscillate at 25.000MHz?
No
Chech the power supply voltage of IC861 again.
Yes
IC701(Pin 81)
PHYCLK
Does 81pin output the oscillation signal of 25MHz?
No
OK, DM850E operates correctly. It can be judged whether DM850E operates correctly though this signal is not connected.
No
DM850E doesn't operates correctly.
It seems that there are following problems.
- F/W is not written correctly in FLASH ROM.
- FLASH ROM is NG.
- SDRAM is NG.

Step 4 : Communication between DM850E and System CPU

The signal shown by following fig are communication line of DM850E and main CPU(IC2001).
Confirm the connection of the signals along these routes.

fig. 1

	CN901	IC911 (5V -> 3V)		IC701
XRST	Pin 12	Pin 12	Pin 11	Pin 190
SPI CS	Pin 21	Pin 2	Pin 3	Pin 143
SPI CLK3	Pin 14	Pin 5	Pin 6	Pin 141
SPI MOSI	Pin 18	Pin 9	Pin 8	Pin 147

fig. 2

	IC701	IC921 (3V -> 5V)		CN901
SPI MISO	Pin 146	Pin 9	Pin 8	Pin 19
SPI REQ3	Pin 100	Pin 5	Pin 6	Pin 20

Step 5 :Communication between DM850E and System CPU

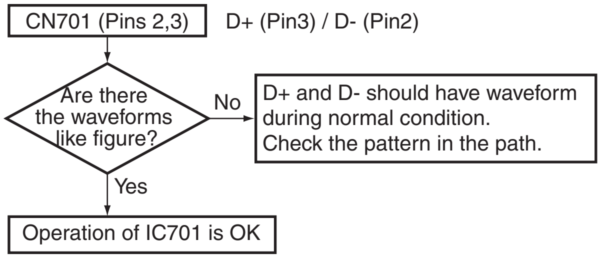
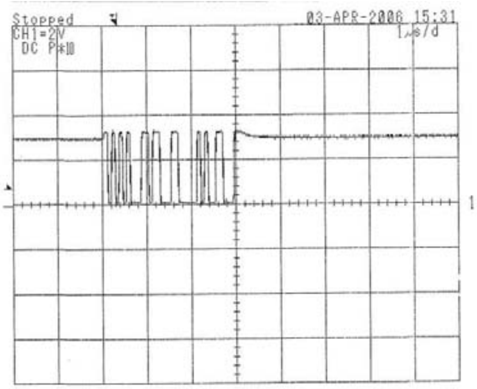
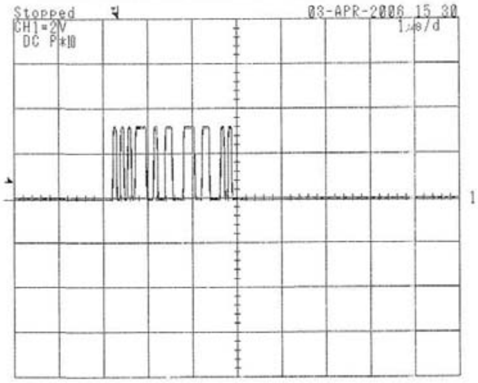

CN701 (Pins 2,3)
D+ (Pin3) / D- (Pin2)
Are there the waveforms like figure?
No
D+ and D- should have waveform during normal condition.
Check the pattern in the path.
Yes
Operation of IC701 is OK

fig. : D+



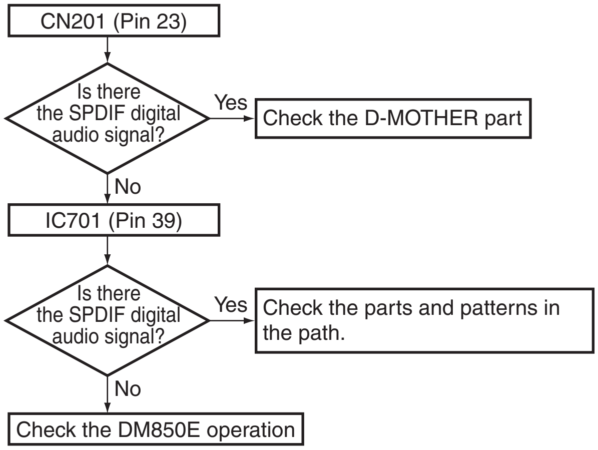
X : 1usec/div, Y : 2V/div

fig. : D-

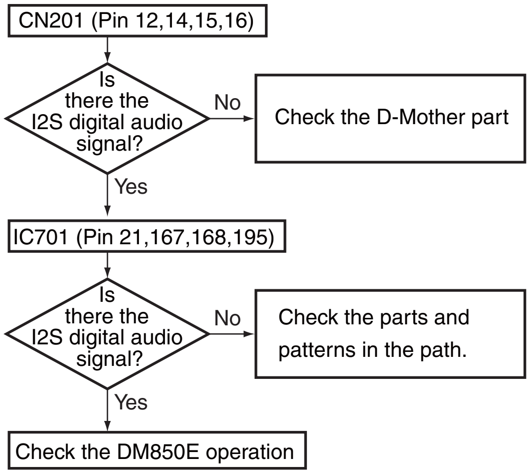


X : 1usec/div, Y : 2V/div

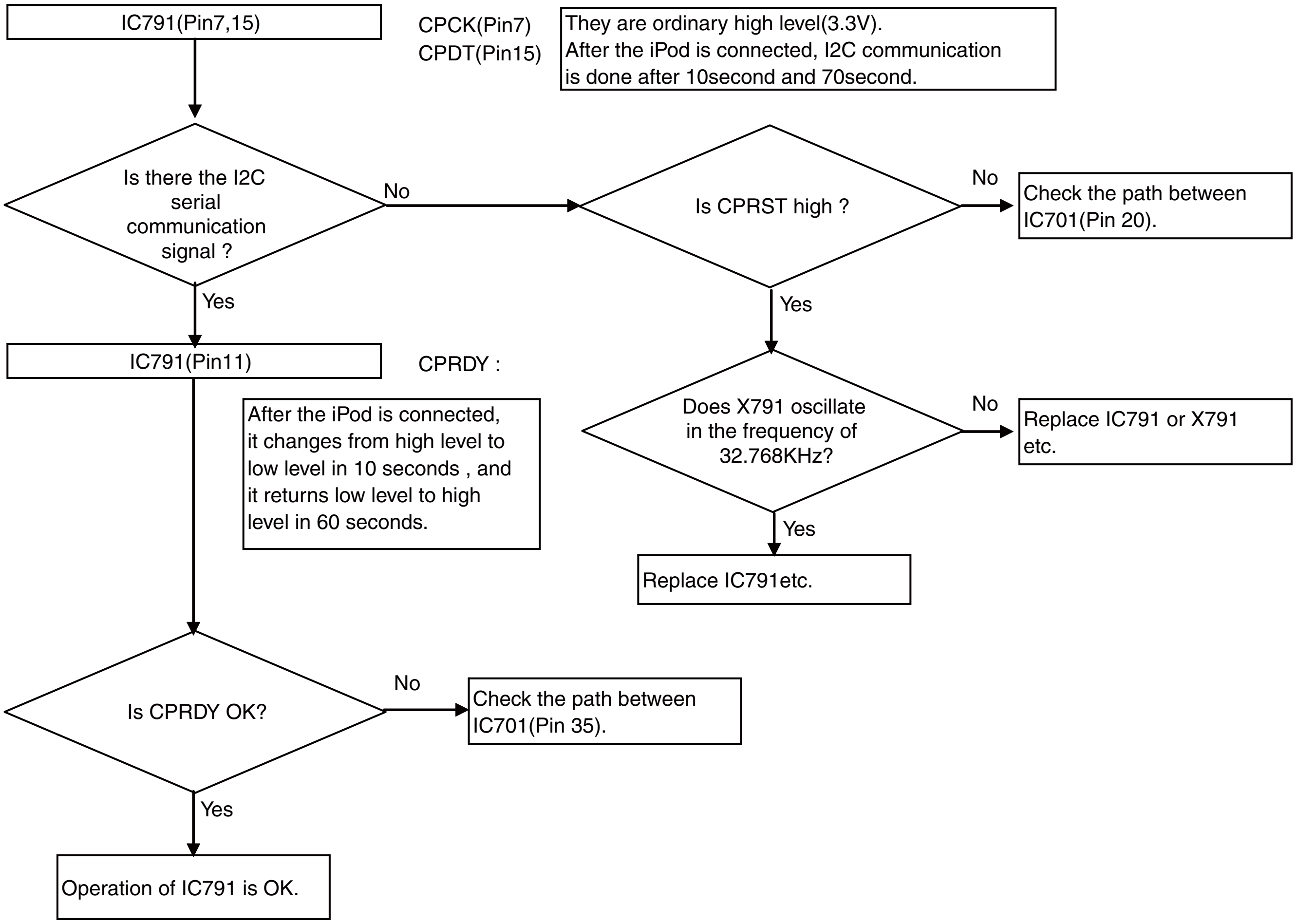
Step 6 : Audio Output


CN201 (Pin 23)
Is there the SPDIF digital audio signal?
Yes
Check the D-MOTHER part
No
IC701 (Pin 39)
Is there the SPDIF digital audio signal?
Yes
Check the parts and patterns in the path.
No
Check the DM850E operation

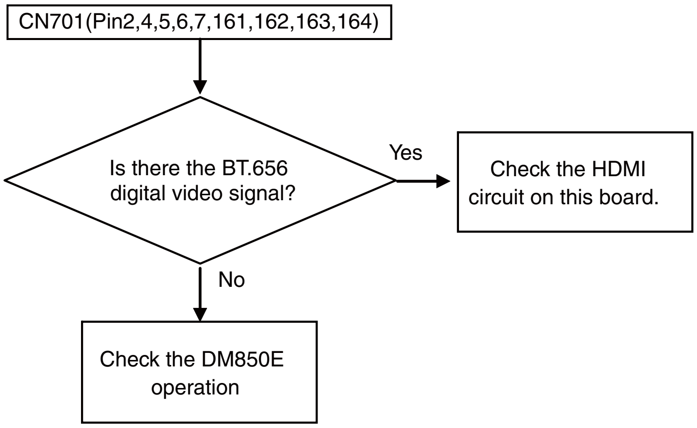
Step 7 : Audio Output (Zone2)


CN201 (Pin 12,14,15,16)
Is there the I2S digital audio signal?
No
Check the D-Mother part
Yes
IC701 (Pin 21,167,168,195)
Is there the I2S digital audio signal?
No
Check the parts and patterns in the path.
Yes
Check the DM850E operation

Step 8 : Communication between DM850E and iPod Co-Processor


IC791(Pin7,15)
CPCK(Pin7)
CPDT(Pin15)
They are ordinary high level(3.3V).
After the iPod is connected, I2C communication is done after 10second and 70second.
Is there the I2C serial communication signal ?
No
Is CPRST high ?
No
Check the path between IC701(Pin 20).
Yes
Yes
IC791(Pin11)
CPRDY :
After the iPod is connected, it changes from high level to low level in 10 seconds , and it returns low level to high level in 60 seconds.
Does X791 oscillate in the frequency of 32.768KHz?
No
Replace IC791 or X791 etc.
Yes
Replace IC791etc.
Is CPRDY OK?
No
Check the path between IC701(Pin 35).
Yes
Operation of IC791 is OK.

Step 9 : Photo Image Output


CN701(Pin2,4,5,6,7,161,162,163,164)
Is there the BT.656 digital video signal?
Yes
Check the HDMI circuit on this board.
No
Check the DM850E operation

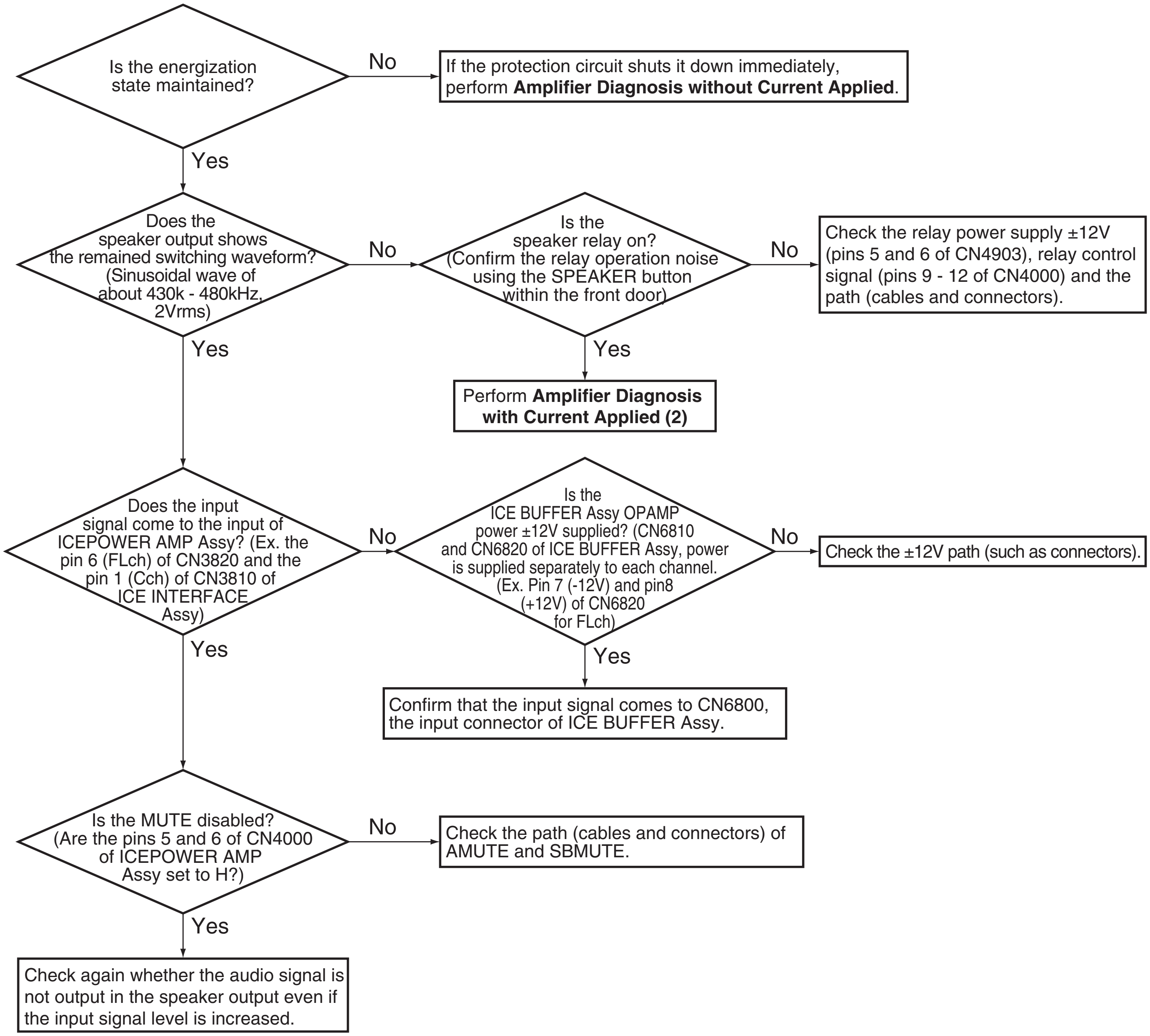
[5] Power Amp Section Troubleshooting

In the speaker output, the sinusoidal wave of about 430k - 480 kHz 2Vrms (when immediately after the current is applied with no signal/no load; the switching frequency varies by the connected load, signal level and the energizing time) is always output.
It is the switching waveform (±64V square wave) in the output stage that has been attenuated through LPF.
If such remained waveform can be observed, it can be assumed that the amplifier is operating normally.

When a signal is input to the amplifier, the output signal of the speaker shows the waveform such that the remained switching waveform is superimposed onto the audio signal. Note that when the input signal level is extremely small, it may not be easy to confirm the audio element since it is buried in the remained switching waveform (approximately 2Vrms).

When no sound is produced with a specific function or sound mode, it is not caused by a failure in the power amplifier block. When there is a failure in the power amplifier block, no sound is produced with every function.
It is recommended to set the speaker setting to "LARGE" for all the channels and the function to "MULTI CH IN" when examining the power amplifier.

Amplifier Diagnosis with Current Applied (1)



Is the energization state maintained?

No: If the protection circuit shuts it down immediately, perform **Amplifier Diagnosis without Current Applied**.

Yes: Does the speaker output shows the remained switching waveform? (Sinusoidal wave of about 430k - 480kHz, 2Vrms)

No: Is the speaker relay on? (Confirm the relay operation noise using the SPEAKER button within the front door)

No: Check the relay power supply ±12V (pins 5 and 6 of CN4903), relay control signal (pins 9 - 12 of CN4000) and the path (cables and connectors).

Yes: Perform **Amplifier Diagnosis with Current Applied (2)**

Yes: Does the input signal come to the input of ICEPOWER AMP Assy? (Ex. the pin 6 (FLch) of CN3820 and the pin 1 (Cch) of CN3810 of ICE INTERFACE Assy)

No: Is the ICE BUFFER Assy OPAMP power ±12V supplied? (CN6810 and CN6820 of ICE BUFFER Assy, power is supplied separately to each channel. (Ex. Pin 7 (-12V) and pin8 (+12V) of CN6820 for FLch)

No: Check the ±12V path (such as connectors).

Yes: Confirm that the input signal comes to CN6800, the input connector of ICE BUFFER Assy.

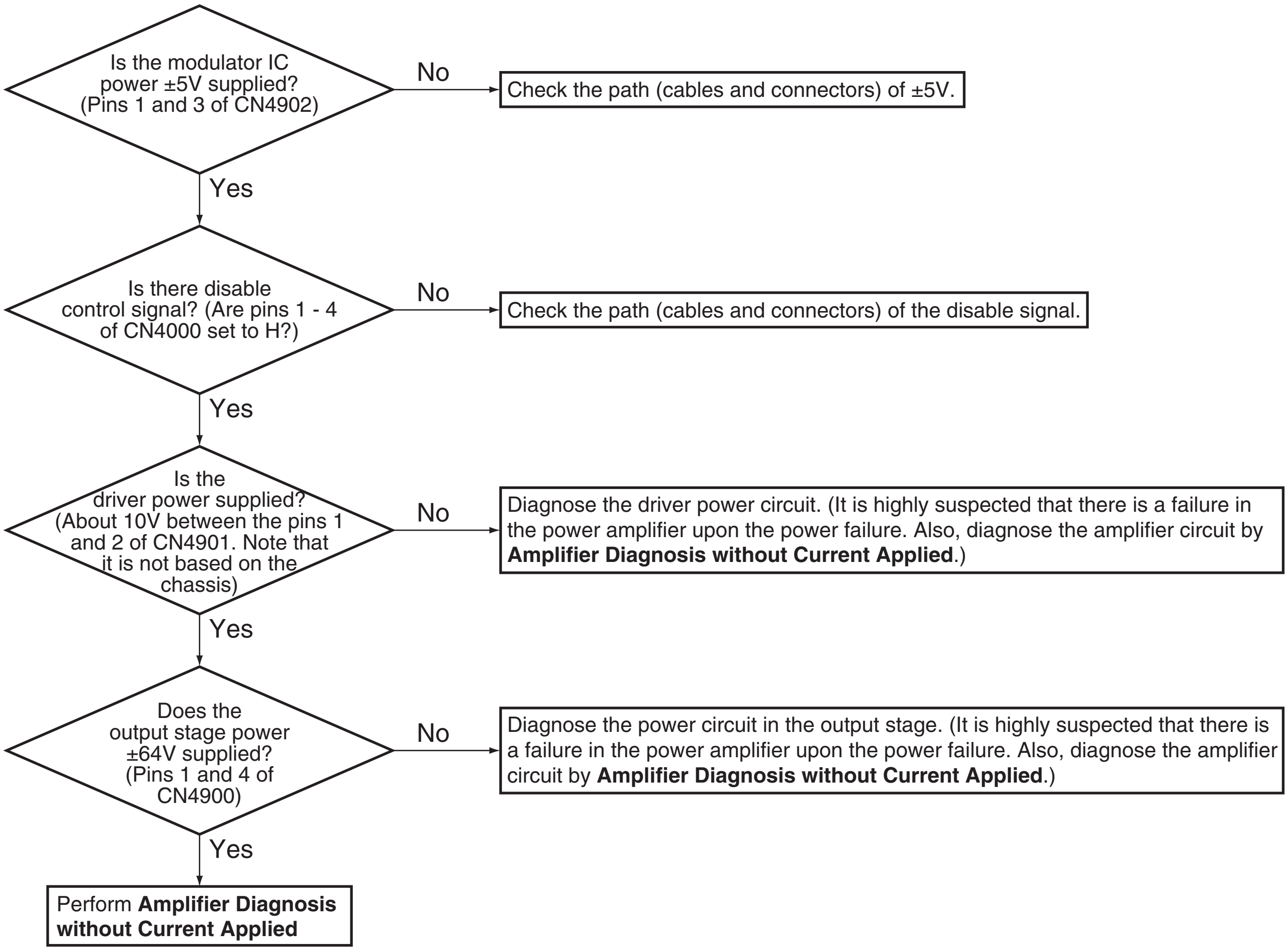
Yes: Is the MUTE disabled? (Are the pins 5 and 6 of CN4000 of ICEPOWER AMP Assy set to H?)

No: Check the path (cables and connectors) of AMUTE and SBMUTE.

Yes: Check again whether the audio signal is not output in the speaker output even if the input signal level is increased.

Amplifier Diagnosis with Current Applied (2)

When the remained switching waveform is not observed in the speaker output, the amplifier is not operating.
Here, confirm that the power and signal necessary for the amplifier to operate are supplied.



Is the modulator IC power ±5V supplied? (Pins 1 and 3 of CN4902)

Check the path (cables and connectors) of ±5V.

Is there disable control signal? (Are pins 1 - 4 of CN4000 set to H?)

Check the path (cables and connectors) of the disable signal.

Is the driver power supplied? (About 10V between the pins 1 and 2 of CN4901. Note that it is not based on the chassis)

Diagnose the driver power circuit. (It is highly suspected that there is a failure in the power amplifier upon the power failure. Also, diagnose the amplifier circuit by **Amplifier Diagnosis without Current Applied**.)

Does the output stage power ±64V supplied? (Pins 1 and 4 of CN4900)

Diagnose the power circuit in the output stage. (It is highly suspected that there is a failure in the power amplifier upon the power failure. Also, diagnose the amplifier circuit by **Amplifier Diagnosis without Current Applied**.)

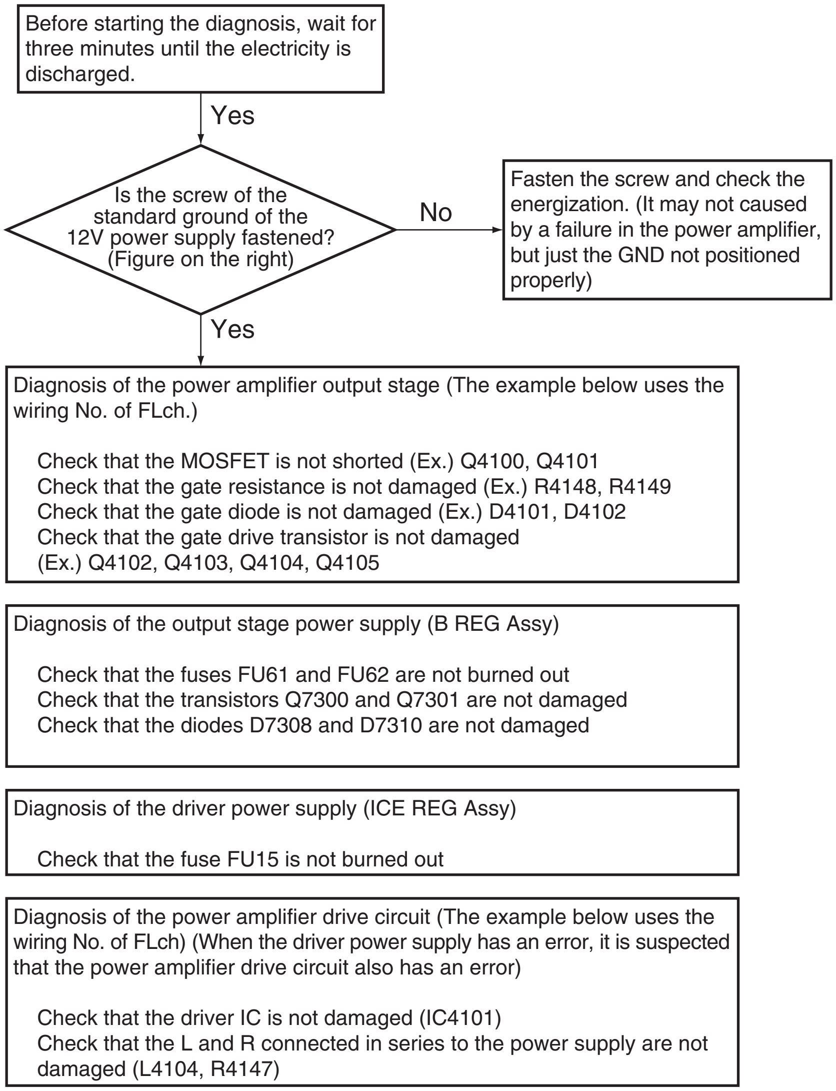
Perform **Amplifier Diagnosis without Current Applied**

Amplifier Diagnosis without Current Applied

The most common symptom of the power amplifier failure is the destruction of the power amplifier output stage or the power amplifier power circuit due to the heavy load, which is, for example, caused by short of the speaker terminal or the use of the non-guaranteed low impedance speaker.

If the protection circuit immediately shuts it down immediately after the current is applied, it is highly likely that it is the above symptom.

The procedure to diagnose/repair without applying current is shown below.



Before starting the diagnosis, wait for three minutes until the electricity is discharged.

Is the screw of the standard ground of the 12V power supply fastened? (Figure on the right)

Fasten the screw and check the energization. (It may not caused by a failure in the power amplifier, but just the GND not positioned properly)

Diagnosis of the power amplifier output stage (The example below uses the wiring No. of FLch.)

Check that the MOSFET is not shorted (Ex.) Q4100, Q4101
Check that the gate resistance is not damaged (Ex.) R4148, R4149
Check that the gate diode is not damaged (Ex.) D4101, D4102
Check that the gate drive transistor is not damaged
(Ex.) Q4102, Q4103, Q4104, Q4105

Diagnosis of the output stage power supply (B REG Assy)

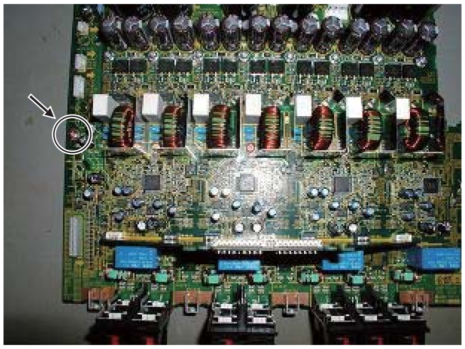
Check that the fuses FU61 and FU62 are not burned out
Check that the transistors Q7300 and Q7301 are not damaged
Check that the diodes D7308 and D7310 are not damaged

Diagnosis of the driver power supply (ICE REG Assy)

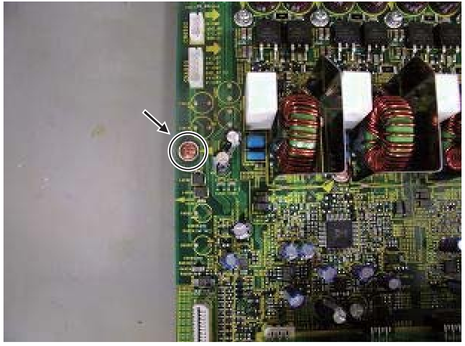
Check that the fuse FU15 is not burned out

Diagnosis of the power amplifier drive circuit (The example below uses the wiring No. of FLch) (When the driver power supply has an error, it is suspected that the power amplifier drive circuit also has an error)

Check that the driver IC is not damaged (IC4101)
Check that the L and R connected in series to the power supply are not damaged (L4104, R4147)



(Closeup)



5.2 CIRCUIT DESCRIPTION

[1] Protection Circuit Process List

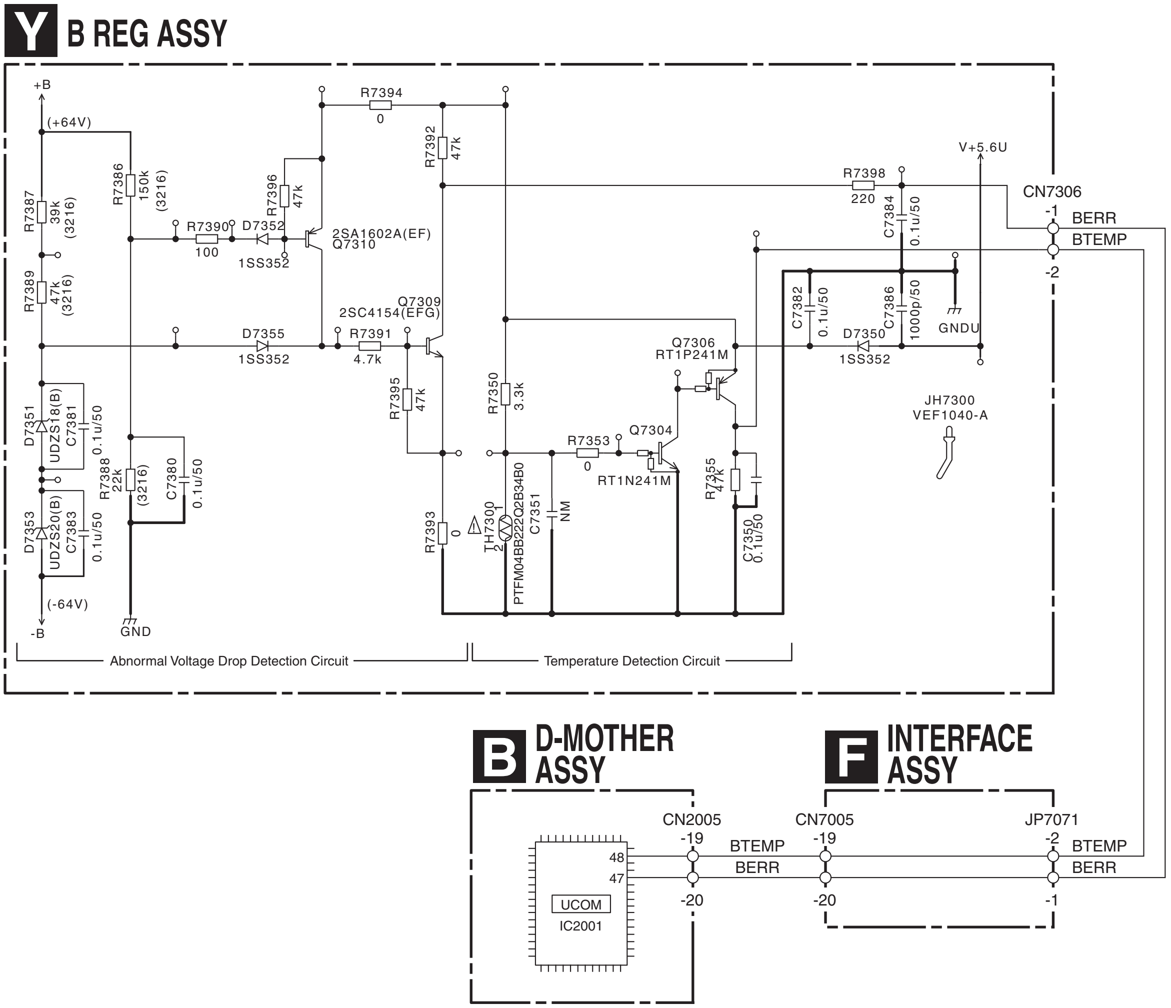
B REG Power Supply

Item	Purpose	Detection Method	Status of Equipment	Warning Indication	Remarks
B REG power supply overheat detection	Detects overheat of transistor(s) in B REG power supply circuit	Detects when posistor detection temperature exceeds 120°C and BTMP port becomes "H". (IC2001 48pin)	Flashes "OVERHEAT" indicator. Shuts down at continuation for more than 3 seconds. LED indicator continues blinking.	"OVERHEAT" and 3 second flashing. Blinks ICE blue LED indicator.	Recoverable by power-on
B REG power supply failure detection	Detect abnormal voltage drop when B REG transistor(s) becomes failure	Detects output voltage of B REG power cuicuit decreases below 38V and BERR port becomes "L". (IC2001 47pin)	Shuts down	Blinks MCACC LED	Unrecoverable

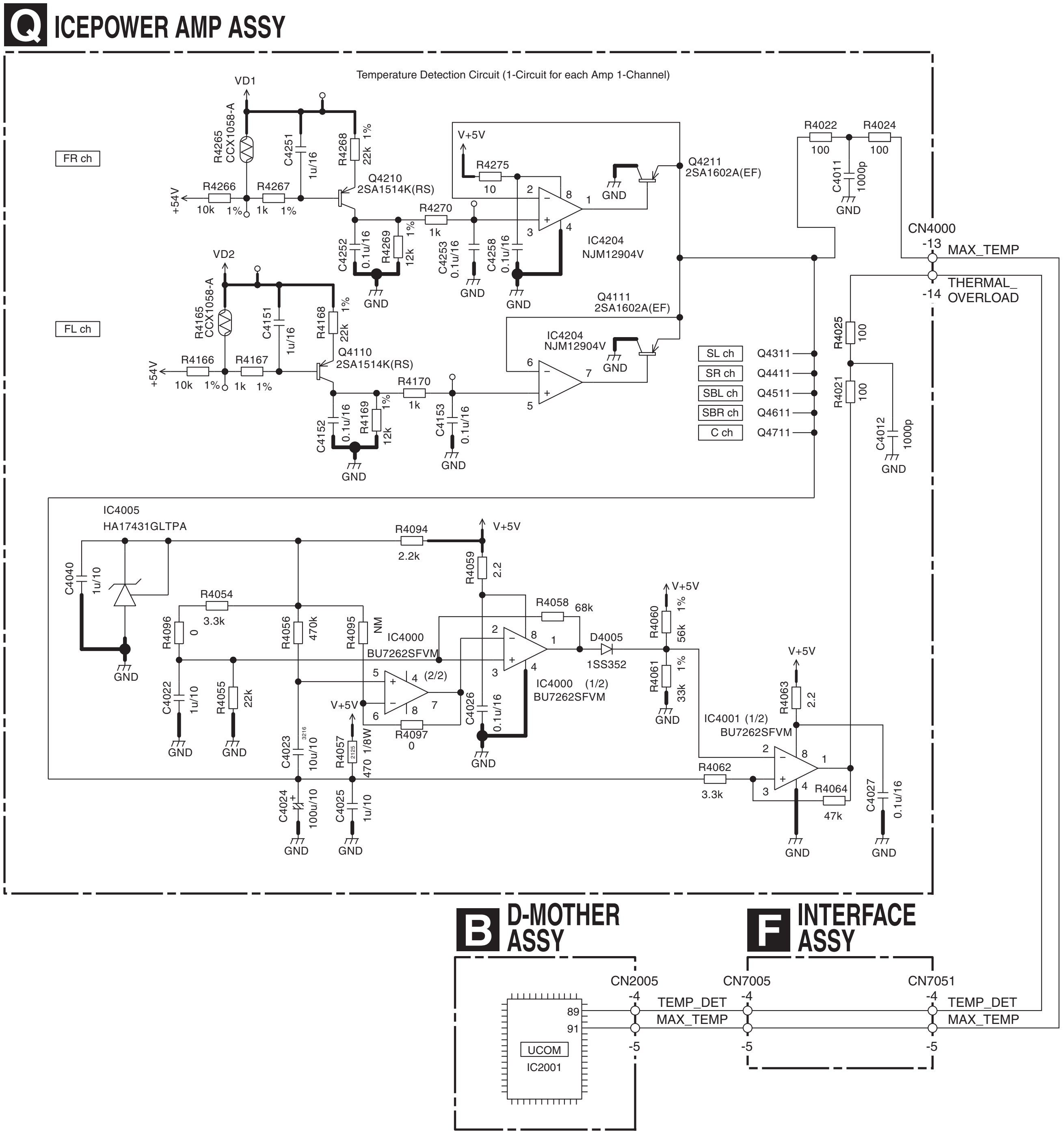
Amplifier Circuit

Item	Purpose	Detection Method	Status of Equipment	Warning Indication	Remarks
Overheat detection	Detects MOS FET temperature of amplifier output stage	Detects when TEMPERR PORT becomes "L" in case of the detecting temperature exceeds 95°C or rapid change by short cuicuit of speaker terminals. (IC2001 89pin)	Shuts down with FL indication of "AMP OVERHEAT". LED indicator continues blinking.	Indicates "AMP OVERHEAT". Blinks ICE blue LED indicator.	Recoverable by power-on
		Detects when MAXTEMP port becomes below 3.3V at NTC Thermistor detect circuit. (IC2001 91pin)	Fan rotates below 3.3V.		
DC detection	Detects DC of amplifier output (After LPF)	Detects when SP output exceeds DC ± 7V and DCERR port becomes "L". (IC2001 90pin)	Let MUTE on, Speater Relay off and shuts down 3 seconds after to blink MCACC LED.	Flashes "AMP ERR"indicator. Blinks MCACC LED	In case of detecting DC abnormality during power-on sequence after detecting DC. Unrecoverable
			Let MUTE on, Speater Relay off and shuts down 3 seconds after to blink ICE blue indicator.	Flashes "AMP ERR"indicator. Blinks ICE blue LED indicator.	In case of detecting DC abnormality during normal operation. Recoverable by power-on after 1 minute.
Fan abnormality detection	Detects a Fan not rotating by loose connector or Fan lock when controling the Fan rotation	Detects when FANDET port becomes "L". (IC2001 88pin)	Shuts down when abnormality continues for more than 3 seconds.	Flashes "FAN STOP"indicator. Blinks Digital Video Scaler LED	Recoverable by power-on
Zobel detection	Protects overcurrent by Zobel Resistance when high power output of higher frequency continued	Detects OLERR port becomes "L". (IC2001 17pin)	Shuts down	Blinks PHASE CONTROL LED	Recoverable by power-on
Overcurrent detection	Protects overcurrent of MOS FET in output stage when overcurrent flows at the output stage	Detects OLERR port becomes "L". (IC2001 17pin)	Shuts down	Blinks PHASE CONTROL LED	Recoverable by power-on
Low Voltage detection (Amplifier power supply)	Detects low voltage when amplifier power supply voltage (normally ± 64V) becomes below ± 42V	Detects OLERR port becomes "L". (IC2001 17pin) AMP_Overload DET	Shuts down	Blinks PHASE CONTROL LED	Recoverable by power-on
Low Voltagae detection (Modulator IC)	Detects low voltage of modulator IC power supply (normally ± 5V) becomes below ± 2 - 3V	No micro-computer detection exists.	No micro-computer control but modulator IC stops by itself.		Recoverable by power-on

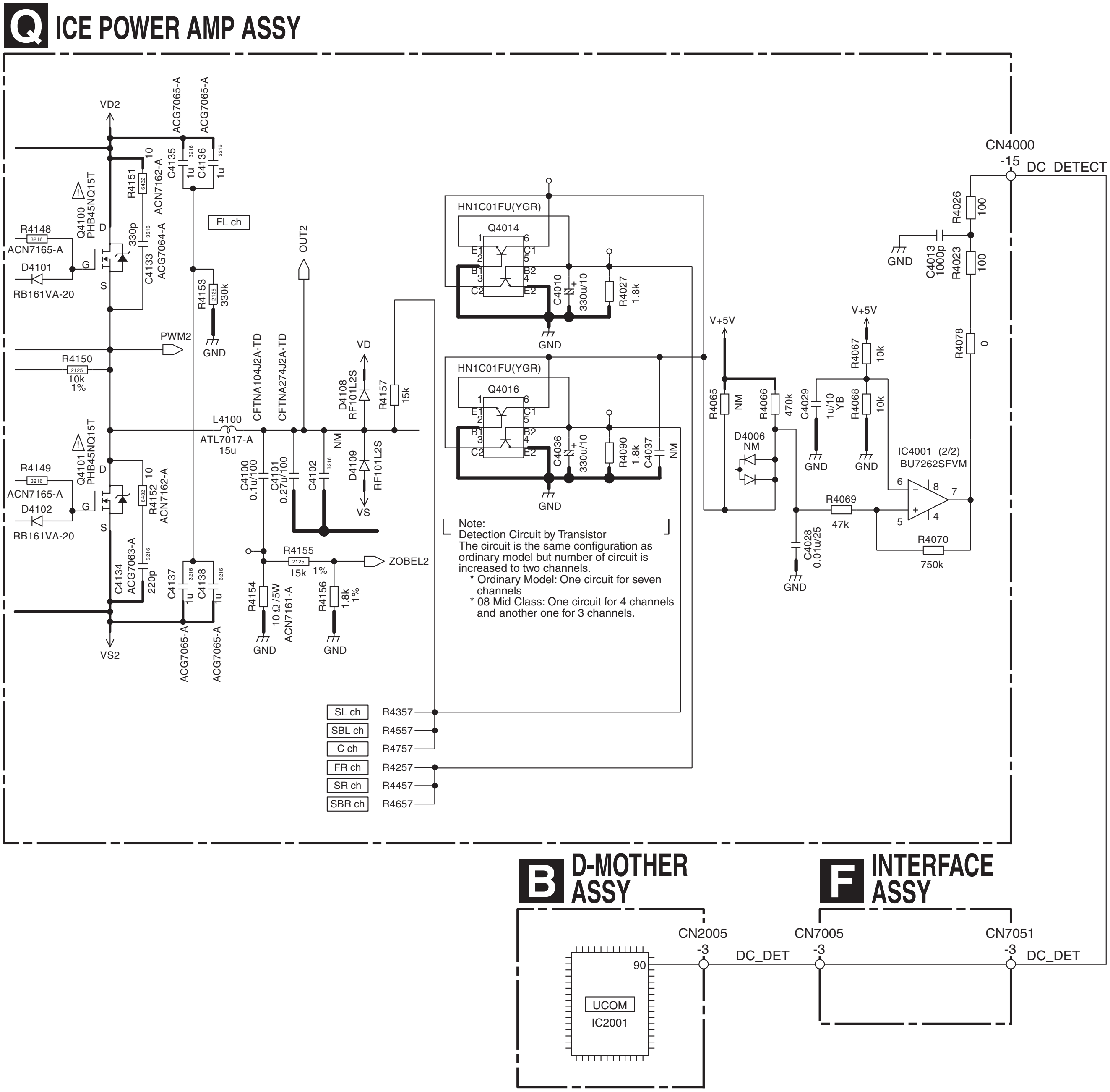
B REG Power Supply Overheat Detection
B REG Power Supply Failure Detection


Y B REG ASSY
+B
(+64V)
R7387 39k (3216)
R7389 47k (3216)
R7386 150k (3216)
R7390 100
D7352 1SS352
R7396 47k
2SA1602A(EF) Q7310
R7394 0
R7392 47k
Q7309 2SC4154(EFG)
D7355 1SS352
R7391 4.7k
R7395 47k
R7393 0
D7351 UDZS18(B)
C7381 0.1u/50
D7353 UDZS20(B)
C7383 0.1u/50
R7388 22k (3216)
C7380 0.1u/50
(-64V)
-B
GND
TH7300 PTFM04BB222Q2B34B0
C7351 NM
R7350 3.3k
R7353 0
Q7304 RT1N241M
Q7306 RT1P241M
R7355 47k
C7350 0.1u/50
C7382 0.1u/50
D7350 1SS352
C7386 1000p/50
C7384 0.1u/50
R7398 220
V+5.6U
GNDU
CN7306
-1 BERR
BTEMP
-2
JH7300 VEF1040-A
Abnormal Voltage Drop Detection Circuit
Temperature Detection Circuit
B D-MOTHER ASSY
CN2005
-19
-20
48
47
UCOM
IC2001
BTEMP
BERR
F INTERFACE ASSY
CN7005
-19
-20
JP7071
-2 BTEMP
-1 BERR

Overheat Detection


Q ICEPOWER AMP ASSY
Temperature Detection Circuit (1-Circuit for each Amp 1-Channel)
FR ch
VD1
R4265
CCX1058-A
C4251
1u/16
R4268
22k 1%
R4266
10k 1%
R4267
1k 1%
+54V
Q4210
2SA1514K(RS)
R4270
1k
C4252
0.1u/16
R4269
12k 1%
C4253
0.1u/16
C4258
0.1u/16
GND
V+5V
R4275
10
IC4204
NJM12904V
Q4211
2SA1602A(EF)
FL ch
VD2
R4165
CCX1058-A
C4151
1u/16
R4168
22k 1%
R4166
10k 1%
R4167
1k 1%
Q4110
2SA1514K(RS)
R4170
1k
C4152
0.1u/16
R4169
12k 1%
C4153
0.1u/16
Q4111
2SA1602A(EF)
SL ch Q4311
SR ch Q4411
SBL ch Q4511
SBR ch Q4611
C ch Q4711
R4022
100
R4024
100
C4011
1000p
CN4000
-13 MAX_TEMP
-14 THERMAL_ OVERLOAD
R4025
100
R4021
100
C4012
1000p
IC4005
HA17431GLTPA
C4040
1u/10
R4094
2.2k
R4059
2.2
R4054
3.3k
R4096
0
R4056
470k
R4095
NM
IC4000
BU7262SFVM
(2/2)
R4058
68k
D4005
1SS352
R4060
56k 1%
R4061
33k 1%
C4022
1u/10
R4055
22k
R4097
0
C4026
0.1u/16
IC4000 (1/2)
BU7262SFVM
R4063
2.2
IC4001 (1/2)
BU7262SFVM
C4023
10u/10
3216
R4057
2125
470 1/8W
R4062
3.3k
R4064
47k
C4027
0.1u/16
C4024
100u/10
C4025
1u/10
B D-MOTHER ASSY
CN2005
UCOM
IC2001
89
91
TEMP_DET
MAX_TEMP
F INTERFACE ASSY
CN7005
CN7051
-4
-5

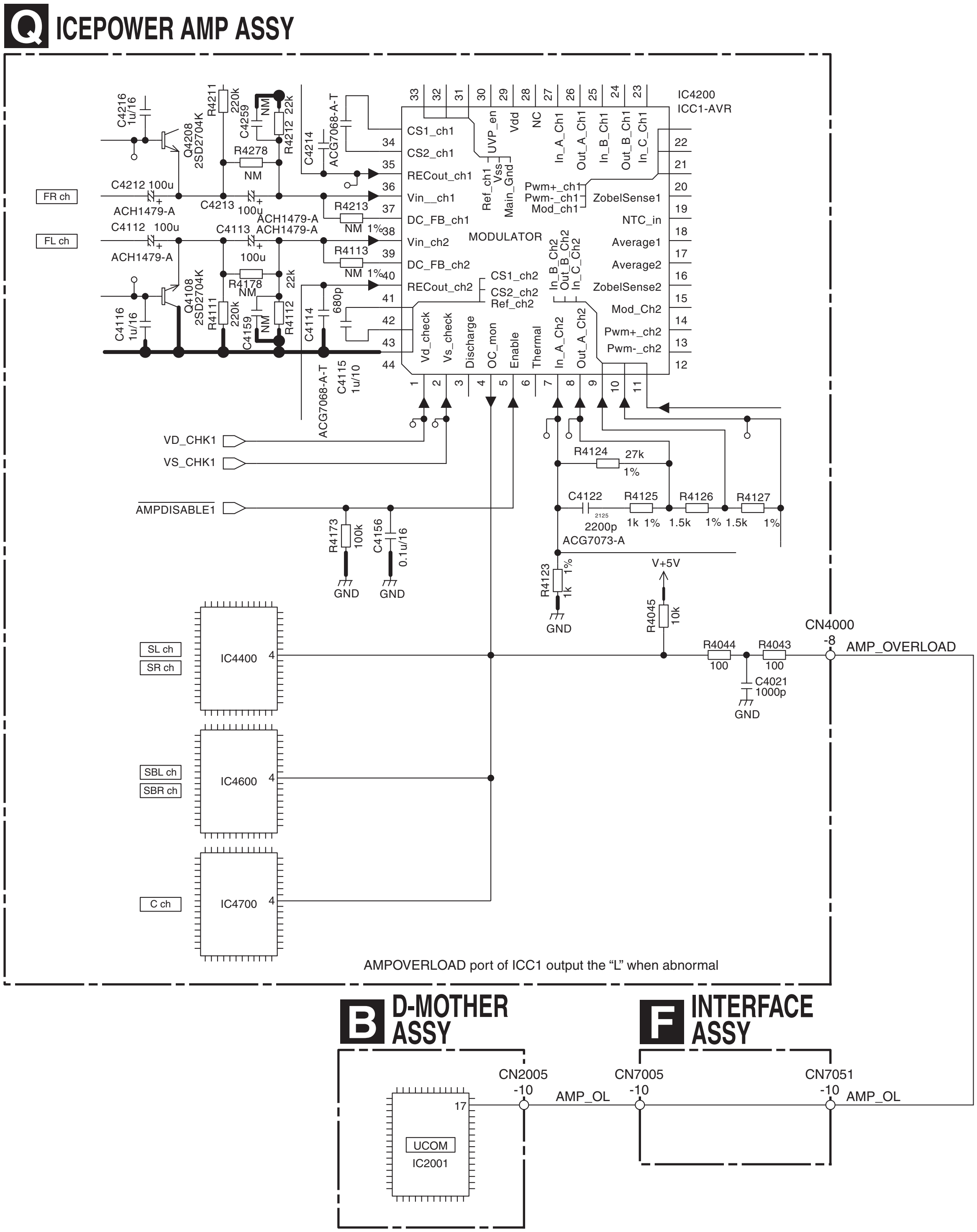
DC Detection


Q ICE POWER AMP ASSY
VD2
VS2
ACG7065-A
C4135 1u
C4136 1u
R4151 10 ACN7162-A
Q4100 PHB45NQ15T
D
G
S
R4148 ACN7165-A
D4101 RB161VA-20
330p C4133 ACG7064-A
R4153 330k
GND
FL ch
OUT2
PWM2
R4150 10k 1%
L4100 ATL7017-A 15u
CFTNA104J2A-TD
CFTNA274J2A-TD
C4100 0.1u/100
C4101 0.27u/100
C4102 NM
VD
VS
D4108 RF101L2S
D4109 RF101L2S
R4157 15k
Q4101 PHB45NQ15T
R4149 ACN7165-A
D4102 RB161VA-20
R4152 10 ACN7162-A
C4134 ACG7063-A 220p
C4137 1u
C4138 1u
R4155 15k 1%
ZOBEL2
R4154 10 Ω /5W ACN7161-A
R4156 1.8k 1%
HN1C01FU(YGR)
Q4014
Q4016
E1 C1 B1 B2 C2 E2
C4010 330u/10
R4027 1.8k
C4036 330u/10
R4090 1.8k
C4037 NM
V+5V
R4065 NM
R4066 470k
D4006 NM
C4028 0.01u/25
C4029 1u/10 YB
R4067 10k
R4068 10k
R4069 47k
R4070 750k
IC4001 (2/2) BU7262SFVM
C4013 1000p
R4023 100
R4026 100
R4078 0
CN4000 -15 DC_DETECT
SL ch R4357
SBL ch R4557
C ch R4757
FR ch R4257
SR ch R4457
SBR ch R4657
B D-MOTHER ASSY
F INTERFACE ASSY
CN2005 -3
CN7005 -3
CN7051 -3
DC_DET
90
UCOM IC2001

Note:
Detection Circuit by Transistor
The circuit is the same configuration as ordinary model but number of circuit is increased to two channels.
* Ordinary Model: One circuit for seven channels
* 08 Mid Class: One circuit for 4 channels and another one for 3 channels.

Zobel Detection

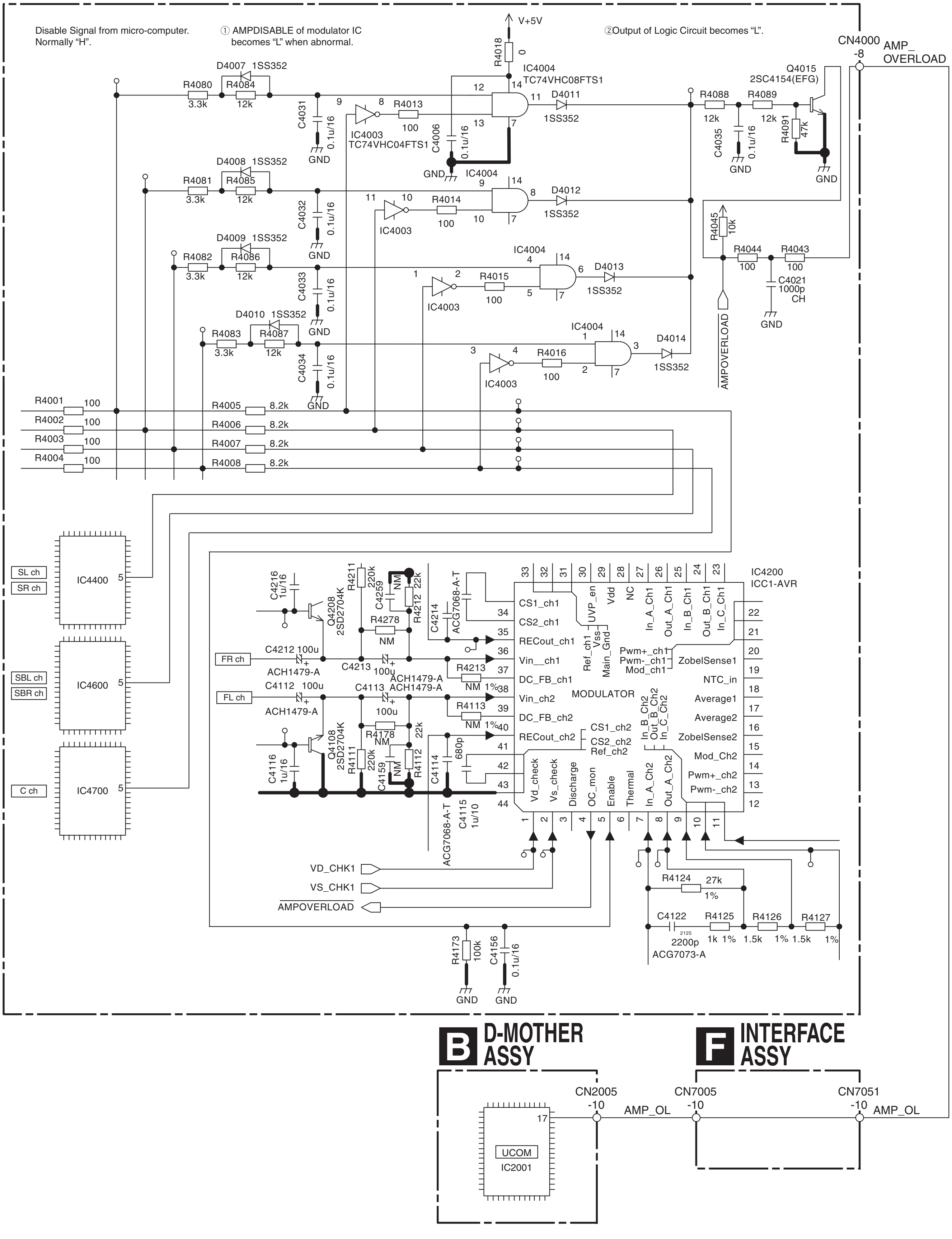
Over Current Detection of MOS FET in Output Stage


Q ICEPOWER AMP ASSY
IC4200
ICC1-AVR
MODULATOR
CS1_ch1
CS2_ch1
RECout_ch1
Vin__ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Ref_ch1
Vss
Main_Gnd
Pwm+_ch1
Pwm-_ch1
Mod_ch1
ZobelSense1
NTC_in
Average1
Average2
ZobelSense2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
In_B_Ch2
Out_B_Ch2
In_C_Ch2
CS1_ch2
CS2_ch2
Ref_ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
C4216 1u/16
Q4208 2SD2704K
R4211 220k
C4259
NM
R4212 22k
R4278 NM
C4214
ACG7068-A-T
FR ch
C4212 100u
ACH1479-A
C4213 100u
ACH1479-A
R4213 NM 1%
FL ch
C4112 100u
ACH1479-A
C4113 ACH1479-A
100u
R4113 NM 1%
R4178 NM
22k
Q4108 2SD2704K
C4116 1u/16
R4111 220k
C4159 NM
R4112
C4114
680p
ACG7068-A-T
C4115 1u/10
VD_CHK1
VS_CHK1
AMPDISABLE1
R4173 100k
C4156 0.1u/16
GND
GND
R4124 27k 1%
C4122 2200p ACG7073-A
R4125 1k 1%
R4126 1.5k 1%
R4127 1.5k 1%
R4123 1k 1%
GND
V+5V
R4045 10k
R4044 100
R4043 100
C4021 1000p
GND
CN4000 -8
AMP_OVERLOAD
SL ch
SR ch
IC4400
SBL ch
SBR ch
IC4600
C ch
IC4700
B D-MOTHER ASSY
UCOM
IC2001
CN2005 -10
AMP_OL
F INTERFACE ASSY
CN7005 -10
CN7051 -10
AMP_OL

AMPOVERLOAD port of ICC1 output the “L” when abnormal

Low Voltage Detection for Amplifier Power Supply

Q ICEPOWER AMP ASSY


Disable Signal from micro-computer.
Normally "H".
① AMPDISABLE of modulator IC becomes "L" when abnormal.
②Output of Logic Circuit becomes "L".
V+5V
R4018 0
IC4004 TC74VHC08FTS1
D4011 1SS352
D4012 1SS352
D4013 1SS352
D4014 1SS352
D4007 1SS352
D4008 1SS352
D4009 1SS352
D4010 1SS352
R4080 3.3k
R4081 3.3k
R4082 3.3k
R4083 3.3k
R4084 12k
R4085 12k
R4086 12k
R4087 12k
C4031 0.1u/16
C4032 0.1u/16
C4033 0.1u/16
C4034 0.1u/16
C4006 0.1u/16
GND
IC4003 TC74VHC04FTS1
R4013 100
R4014 100
R4015 100
R4016 100
R4088 12k
R4089 12k
C4035 0.1u/16
R4091 47k
Q4015 2SC4154(EFG)
CN4000 -8
AMP_OVERLOAD
R4045 10k
R4044 100
R4043 100
C4021 1000p CH
AMPOVERLOAD
R4001 100
R4002 100
R4003 100
R4004 100
R4005 8.2k
R4006 8.2k
R4007 8.2k
R4008 8.2k
SL ch
SR ch
IC4400
SBL ch
SBR ch
IC4600
C ch
IC4700
FR ch
FL ch
C4216 1u/16
Q4208 2SD2704K
R4211 220k
C4259 NM
R4212 22k
R4278 NM
C4214 ACG7068-A-T
C4212 100u ACH1479-A
C4213 100u ACH1479-A
R4213 NM 1%
C4112 100u ACH1479-A
C4113 100u ACH1479-A
R4113 NM 1%
R4178 NM
C4116 1u/16
Q4108 2SD2704K
R4111 220k
C4159 NM
R4112 22k
C4114 680p
C4115 1u/10 ACG7068-A-T
IC4200 ICC1-AVR
MODULATOR
CS1_ch1
CS2_ch1
RECout_ch1
Vin__ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Ref_ch1
Vss
Main_Gnd
Pwm+_ch1
Pwm-_ch1
Mod_ch1
ZobelSense1
NTC_in
Average1
Average2
ZobelSense2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
CS1_ch2
CS2_ch2
Ref_ch2
In_B_Ch2
Out_B_Ch2
In_C_Ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
VD_CHK1
VS_CHK1
AMPOVERLOAD
R4124 27k 1%
C4122 2200p ACG7073-A
R4125 1k 1%
R4126 1.5k 1%
R4127 1.5k 1%
R4173 100k
C4156 0.1u/16
B D-MOTHER ASSY
CN2005 -10
AMP_OL
UCOM
IC2001
17
F INTERFACE ASSY
CN7005 -10
CN7051 -10
AMP_OL

[2] Error Indications When an Abnormality in The Amplifier System Is Detected

[Purpose]

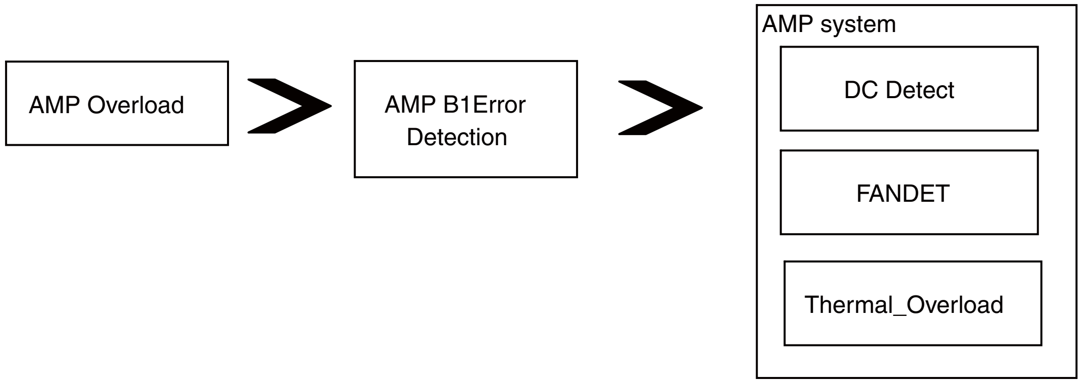
Errors upon detection of abnormalities in the amp system are indicated.

[Error indications]

	FL Display	LED flashes	Status	Timing (sec.)	Remarks
(1)	AMP ERR	ICE Blue LED	When the AMP DC is detected during normal operation.	FL flashes 3 times. LED flashes after the power off.	
		MCACC LED	When the AMP DC is detected during power-on sequence after the DC output was once detected.	FL flashes 3 times. LED flashes after the power off.	
(2)	NA	PHASE CONTROL	When an abnormality of electric current of output stage is detected.	LED flashes after the power off.	
(3)	NA	PHASE CONTROL	When an abnormality of overheat of output stage is detected.	LED flashes after the power off.	
(4)	FAN STOP	VIDEO SCALER	When an abnormality is detected in the fan for the AMP.	FL flashes 3 times. LED flashes after the power off.	
(5)	OVERHEAT	ICE Blue LED	When an abnormality of overheat is detected in the power supply B REG circuit.	FL flashes 3 times. LED flashes after the power off.	Abnormality detection in the power supply B REG circuit
(6)	NA	MCACC LED	When an abnormality is detected in the ouput voltage of the power supply B REG circuit.	LED flashes after the power off.	
(7)	12V TRG ERR	NA	When the 12V trigger circuit is short-circuited.	Flashes	
(8)	USB ERROR1	NA	When the overload USB device (over500 mA) is connected.	Flashes	
(9)	HDCP ERROR	NA	When an HDCP ERROR is detected.	Flashes 5 seconds	Warning indication for HDMI Simplay
(10)	NOT SUPPORT	NA	When the monitor outputs a non supported video format.	Flashes 5 seconds	
(11)	HDMI NG	NA	When an error is detected during communication with the HDMI micro-computer.	Flashes	Warning indication for microcomputer commnunication
(12)	DSP NG	NA	When an error is detected during communication with the DSP micro-computer.	Flashes	

[Detection and display priority]

In principle, the abnormality is preferentially detected as the following order.



[Descriptions]

(1)	AMP ERR	In Normal Operation mode, if a failure in the amp block or high DC output is detected, "AMP ERR" appears and starts flashing, and the shutdown process starts. The power is shut off, and the ICE Blue LED starts flashing. To restore the previous status 1 minutes or more after a shutdown, just turn the unit back on.
		If a failure in the amp block or high DC output is detected during a power-on sequence after high DC output was once detected, "AMP ERR" appears and starts flashing, and the shutdown process starts. The power is shut off, and the MCACC LED starts flashing. To restore the previous status, follow the procedure described in "How to Enter Release Mode" below then turn the unit back on. If the unit shuts off again, the AMP block may be in failure.
(2)	Overcurrent detection	Upon detection of overcurrent in the MOSFET at the amp output stage, the unit power off immediately, and the PHASE CONTROL LED starts flashing. The previous stage will be restored when the unit is turned back on.
(3)	Overheat detection	If abnormality temperature is detected in the MOSFET at the amp output stage, the unit power off immediately, and the PHASE CONTROL LED starts flashing. To restore the previous status, turn the unit back on.
(4)	FAN STOP	If abnormality is detected in the fan for the AMP, "FAN STOP" appears and starts flashing, and the shutdown process starts. The power is shut off. The VIDEO SCALER LED starts flashing. To restore the previous status, turn the unit back on.
(5)	OVERHEAT	If abnormality temperature is detected in the power supply B REG circuit, the unit power off immediately, and the ICE Blue LED starts flashing. To restore the previous status, turn the unit back on.
(6)	Failure in the power supply B REG circuit	If abnormality voltage is detected in the power supply B REG circuit, the unit power off immediately, and the MCACC LED starts flashing. To restore the previous status, follow the procedure described in "How to Enter Release Mode" below then turn the unit back on. If the unit shuts off again, the AMP block may be in failure.
(7)	12V TRG ERR	The 12V trigger circuit is short-circuited, and a overcurrent is generated.
(8)	USB ERROR1	The connected USB device is overload.
(9)	HDCP ERROR	The monitor does not support HDCP type or is in standby mode.
(10)	NOT SUPPORT	When an input analog signal is converted and output as an HDMI signal (via the scaler), the output signal is of a resolution not supported by the connected monitor.
(11)	HDMI NG	There is no response from the HDMI microcomputer.
(12)	DSP NG	There is no response from the DSP microcomputer.

[How to Enter Release Mode]

During Standby mode, simultaneously press and hold the " ⬇ (DOWN)" and "ZONE2 ON/OFF" keys for 2 seconds.

6. SERVICE MODE

6.1 TEST MODE

The Service mode has three functional blocks (VERSION block, PROTECT block and DOWNLOAD block).

[1] How to Enter The Service Mode

1. Turn off MULTI-ZONE. Lower MASTER VOLUME to the minimum (---dB) and turn off the power.
2. After the power-off, press and hold down both the "ENTER" key and the "MULTI-ZONE ON/OFF" key for approximately five seconds.

[2] How to Exit The Service Mode

Turning off the power or pressing the RETURN key returns to the normal mode.

[3] Mode Transition Methods For Each of The VERSION Block, PROTECT Block and DOWNLOAD Block

*If no key is pressed within 10 seconds, the Service mode returns to the normal mode.

Key operation	FL display
VERSION block 1/4 Display MAIN / EVENT microcomputer.	M1.000 E1.000
[→] [←]	
PROTECT block 1/11 Display number of times DC is detected.	DC : 000
[→] [←]	
DOWNLOAD block 1/7 Display MAIN computer DOWNLOAD.	MAIN DL[START]
[→] [←]	
Return to VERSION block 1/4.	

1) VERSION block

This block displays version information of various microcomputers and DSP firmware.
*If no key is pressed within 10 seconds, the Service mode returns to the normal mode.

Key operation	FL display	Explanation on displayed versions
Test mode ON		
↓		
VERSION block 1/4 MAIN/EVENT microcomputer	M1.000 E1.000	M * . *** : MAIN microcomputer E * . *** : EVENT microcomputer
[↓] [↑]		
VERSION block 2/4 DISPLAY (EMMA) microcomputer	DISP 1.000	DISP * . *** : DISPLAY microcomputer
[↓] [↑]		
VERSION block 3/4 DSP/HDMI microcomputer	D1.000 H1.000	D * . *** : DSP microcomputer H * . *** : HDMI microcomputer
[↓] [↑]		
VERSION block 4/4 1stDSP/2ndDSP firmware	f1.000 s1.000	f * . *** : 1st DSP firmware s* . *** : 2nd DSP firmware
[↓] [↑]		
To PROTECT block		

2) PROTECT block

This block displays number of times protection processing is detected.
*If no key is pressed within 10 seconds, the Service mode returns to the normal mode.

Key operation	FL display
PROTECT block 1/11 Display number of times DC is detected.	DC : 000
[↓] [↑]	
PROTECT block 2/11 Display number of times OVERLOAD is detected.	OVER: 010
[↓] [↑]	
PROTECT block 3/11 Display number of times COMBINATION is detected. (Detects DC and OVERLOAD simultaneously)	CON : 002
[↓] [↑]	
PROTECT block 4/11 Displays number of times FAN error is detected.	FAN : 002
[↓] [↑]	
PROTECT block 5/11 Display number of times overheat is detected.	TEMP1: 255
[↓] [↑]	
PROTECT block 6/11 Display number of times abnormal temperature is detected.	TEMP2: 255
[↓] [↑]	
PROTECT block 7/11 Displays number of times abnormal temperature at PowerAmp supply is detected.	**BTMP: 126**
[↓] [↑]	
PROTECT block 8/11 Display number of times defect at PowerAmp supply is detected.	**BERR: 125**
[↓] [↑]	

Key operation	FL display
PROTECT block 9/11 Resetting the number of times error is detected	RESET ◀ HOLD ▶
[↓] [↑]	
PROTECT block 10/11 Display accumulated time & RESET.	12345h20m◀HLD▶
[↓] [↑]	
PROTECT block 11/11 The Timer of Exception "Set Stream Path" command on CEC.	EX.SSP◀1500ms▶
[↓] [↑]	
To DOWNLOAD block	

Resetting the number of times error is detected

Key operation	FL display
[←][→]	RESET ◀CLEAR?▶
[ENTER]	RESET [RESET]
↓ To normal mode	

Resetting the accumulated time

Key operation	FL display
[←][→]	12345h20m◀CL ?▶
[ENTER]	0h 0m◀RST▶
↓ To normal mode	

Setting of the Timer of Exception "Set Stream Path" command on CEC.

Key operation	FL display
[←][→]	EX.SSP◀ 600ms▶
↓ To normal mode	

3) DOWNLOAD block

This block enters the rewriting mode of various microcomputers and DSP firmware.

Key operation	FL display
DOWNLOAD block 1/7 MAIN computer DOWNLOAD	MAIN DL[START]
[↓] [↑]	
DOWNLOAD block 2/7 EVENT computer DOWNLOAD	EVNT DL[START]
[↓] [↑]	
DOWNLOAD block 3/7 DISP computer DOWNLOAD	DISP DL[START]
[↓] [↑]	
DOWNLOAD block 4/7 DSP computer DOWNLOAD	DSPM DL[START]
[↓] [↑]	
DOWNLOAD block 5/7 HDMI computer DOWNLOAD	HDMI DL[START]
[↓] [↑]	
DOWNLOAD block 6/7 1stDSP FIRM DOWNLOAD	DSP1 DL[START]
[↓] [↑]	
DOWNLOAD block 7/7 2ndDSP FIRM DOWNLOAD	DSP2 DL[START]
[↓] [↑]	
To VERSION block	

7. DISASSEMBLY

Note 1: Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

Note 2: For performing the diagnosis shown below, the following jigs for service is required:

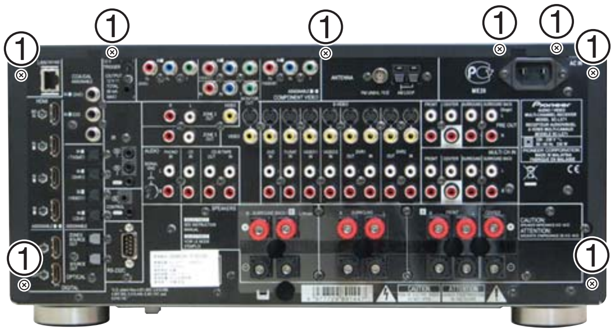
- 27P FFC (GGD1588)
- 19P FFC (GGD1589) x2
- 21P FFC (GGD1590)
- 16P FFC (GGD1591)
- 30P+13P board to board extension jig cable (GGD1592)
- 17P+19P board to board extension jig cable (GGD1593)
- 5P PH HOUSING ASSY (GGD1594) x3

Note 3: Before starting the diagnosis, wait for three minutes until the electricity of the unit is discharged.

1. Disassembly

1 Bonnet

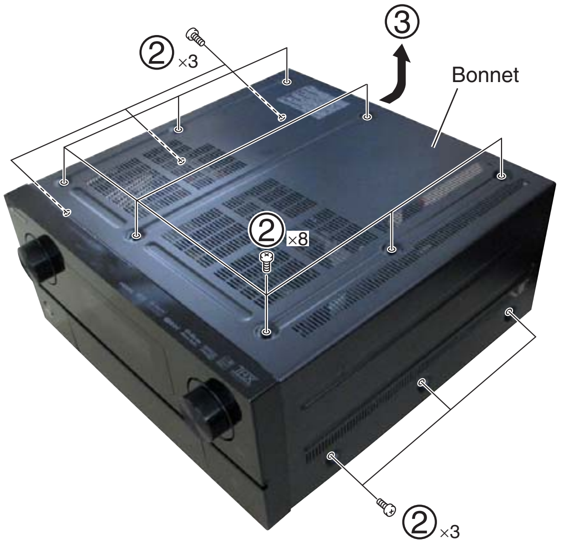
① Remove the eight screws.



● **Rear view**

② Remove the fourteen screws.

③ Remove the Bonnet.



2 Rear Panel

① Remove the two screws.

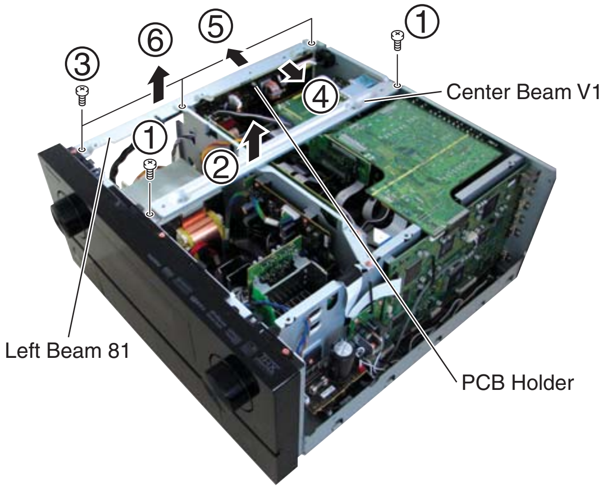
② Remove the Center Beam V1.

③ Remove the three screws.

④ Disconnect the one connector.

⑤ Remove the PCB Holder from the Left Beam 81.

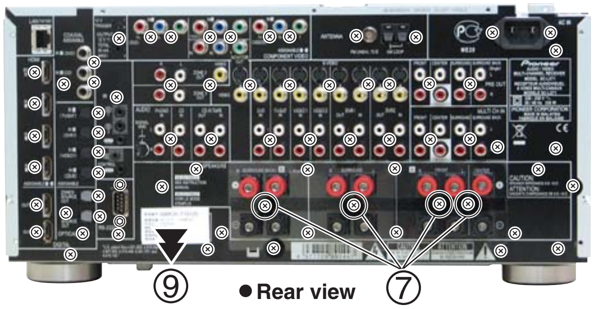
⑥ Remove the Left Beam 81.



⑦ Remove the four Cushion circle 14B.

⑧ Remove the 71 screws.

⑨ Remove the Rear Panel.



● **Rear view**

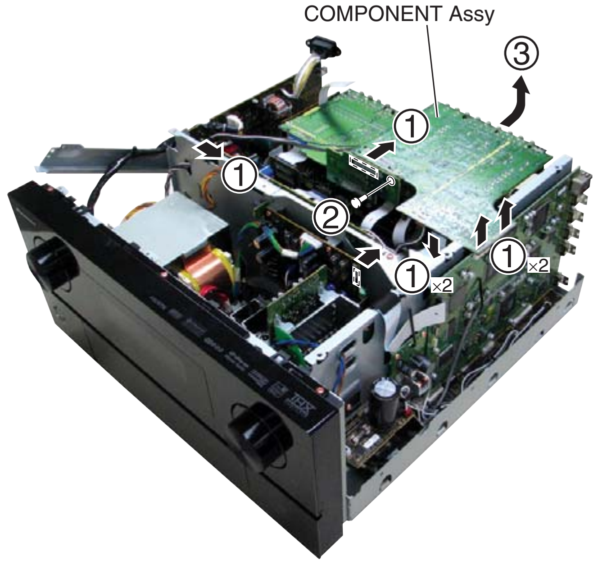
3 PCB Assys and ICE Cover

• COMPONENT Assy

① Disconnect the one flexible cable and five connectors.

② Remove the one Push Rivet.

③ Remove the COMPONENT Assy.

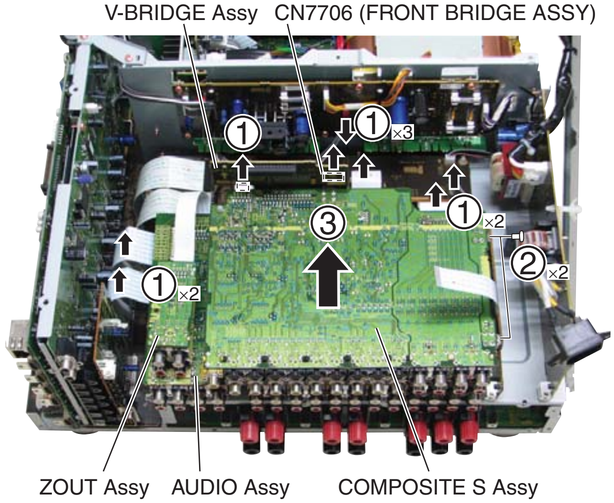

COMPONENT Assy
③
①
①
②
① ×2
① ×2

• AUDIO Assy, COMPOSITE S Assy, V-BRIDGE Assy and ZOUT Assy

① Disconnect the six flexible cables and two connector.

② Remove the two Push Rivets.

③ Remove the AUDIO Assy, COMPOSITE S Assy, V-BRIDGE Assy and ZOUT Assy.

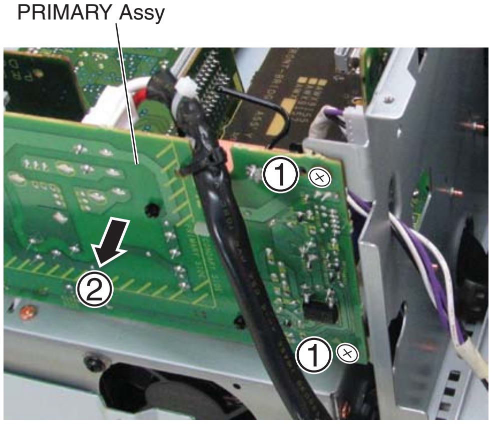

V-BRIDGE Assy
CN7706 (FRONT BRIDGE ASSY)
①
① ×3
① ×2
③
② ×2
① ×2
ZOUT Assy
AUDIO Assy
COMPOSITE S Assy

● **Rear view**

• PRIMARY Assy

① Remove the two screws.

② Remove the PRIMARY Assy.

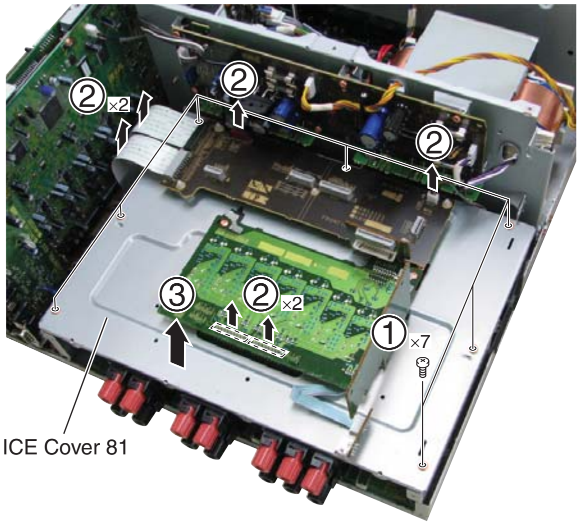

PRIMARY Assy
①
②
①

• ICE Cover 81 Section

① Remove the seven screws.

② Disconnect the two flexible cables and four connectors.

③ Remove the ICE Cover 81.


② ×2
②
②
③
② ×2
① ×7
ICE Cover 81

4 Diagnosis

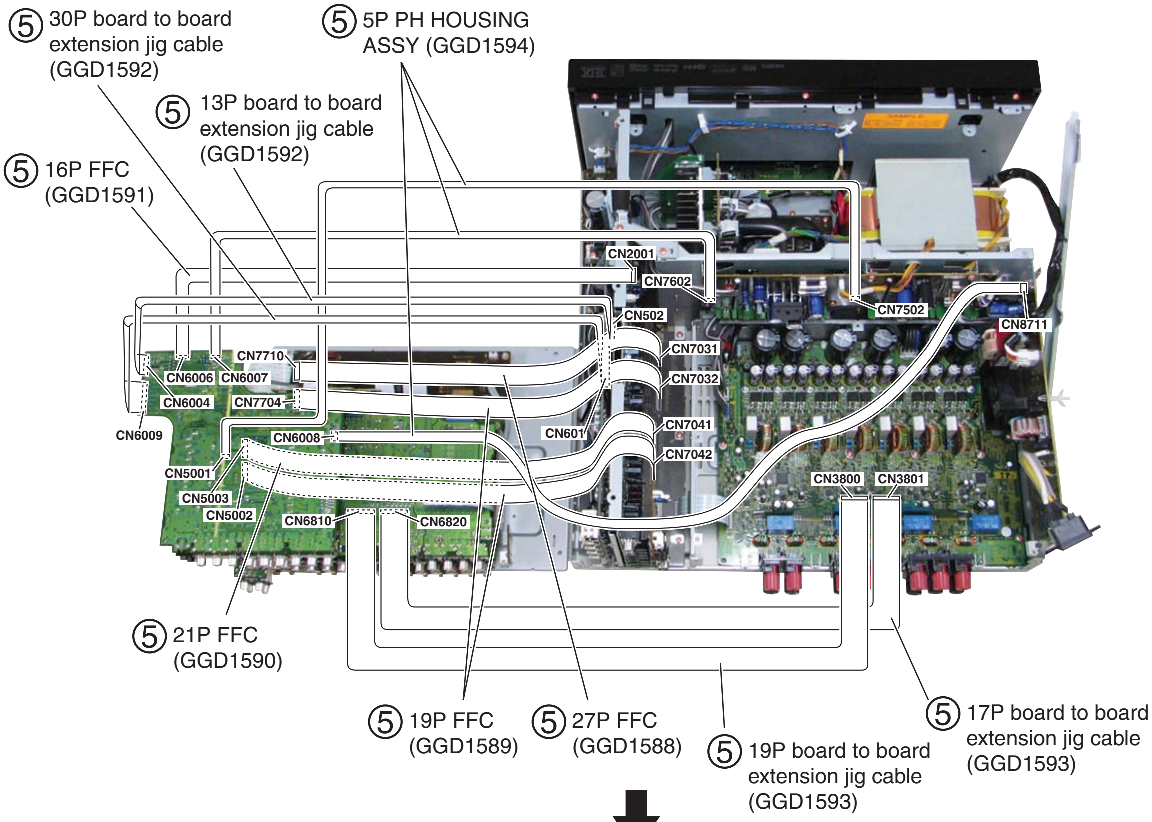
① Reassembling the PRIMARY Assy.

② Reassembling the AUDIO Assy, COMPOSITE S Assy, V-BRIDGE Assy and ZOUT Assy on the Ice Cover 81.

③ Reassembling the COMPONENT Assy on the V-BRIDGE Assy.

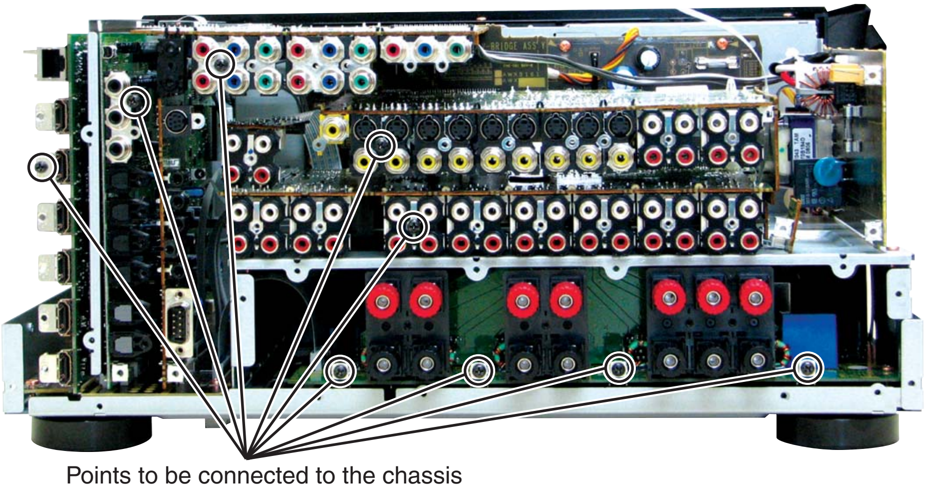
④ Connect the twelve extension jig cables.

⑤ Arrange the unit as shown in the photo below.


⑤ 30P board to board extension jig cable (GGD1592)
⑤ 5P PH HOUSING ASSY (GGD1594)
⑤ 13P board to board extension jig cable (GGD1592)
⑤ 16P FFC (GGD1591)
CN2001
CN7602
CN502
CN7502
CN8711
CN7031
CN7032
CN7710
CN6006
CN6007
CN6004
CN7704
CN6009
CN6008
CN601
CN7041
CN7042
CN5001
CN5003
CN5002
CN6810
CN6820
CN3800
CN3801
⑤ 21P FFC (GGD1590)
⑤ 19P FFC (GGD1589)
⑤ 27P FFC (GGD1588)
⑤ 19P board to board extension jig cable (GGD1593)
⑤ 17P board to board extension jig cable (GGD1593)

Diagnosis

Note : As mentioned below, detach the rear panel, re-fasten the screws at the corresponding points, and connect the chassis to the ground.


Points to be connected to the chassis

8. EACH SETTING AND ADJUSTMENT

8.1 HOW TO UPDATE FIRMWARE

[1] MAIN, DSP, HDMI, EVENT and DISP Microcomputer

[Purpose]

Refer to this section when updating the firmware of each microcomputer is required by the service information, etc.

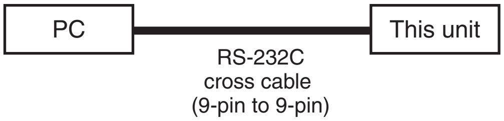
[Necessary Tools]

- PC with a serial port
- RS-232C cable (9-pin to 9-pin, cross)
- Firmware ("mot" extension) **(except DISP u-com)**
  ("sz0" extension) **(for DISP u-com)**
- Program for updating (ufu.exe: ver. 1.08) **(except DISP u-com)**
  (ufu.exe: ver. 1.10) **(for DISP u-com)**

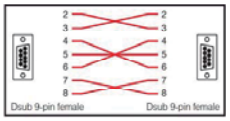
[Connections)]

Connect as indicated in the figure right:

(MAIN microcomputer)
(EVENT microcomputer)
(HDMI microcomputer)
(DSP microcomputer)
(DISP microcomputer)



Pin-out diagram of
RS-232C cross cable



[Note]

Do NOT disconnect the AC power cords of this unit nor the PC.

1) HDMI, MAIN, DSP and EVENT microcomputer

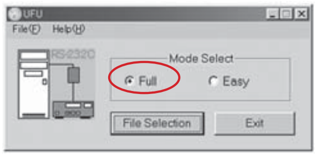
[Procedures]

1. Turn off the power to this unit by setting the main volume level to "---dB" and Multi-Zone to "OFF".
2. Connect the 232C cross cable and the PC, as indicated in "Connections".
3. Simultaneously press and hold the ENTER and MULTI-ZONE ON/OFF keys for about 5 seconds.
4. Turn the power ON at CONFIDENTIAL PANEL mode.
5. (MAIN microcomputer)
   Press ↓ key and select “MAIN DL [START]” display.
   Press ENTER key and set to “MAIN DL [GO ON]”.

   (EVENT microcomputer)
   Press ↓ key and select “EVNT DL [START]” display.
   Press ENTER key and set to “EVNT DL [GO ON]”.

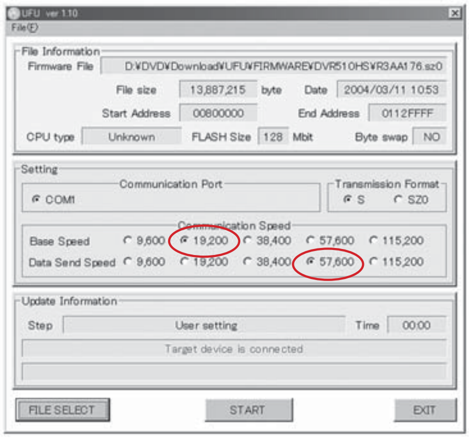
   (DSP microcomputer)
   Press ↓ key and select “DSPM DL [START]” display.
   Press ENTER key and set to “DSPM DL [GO ON]”.

   (HDMI microcomputer)
   Press ↓ key and select “HDMI DL [START]” display.
   Press ENTER key and set to “HDMI DL [GO ON]”.
6. Double-click on "ufu.exe: ver.1.08".
7. Check that "Full" is selected in MODE SELECT.
8. Select the firm ware file with "**mot**" extension.
9. Select the communication speed.
   - Basic speed: 19200
   - Data transfer speed: 57600
10. Click on "START" button.
11. "Completed" is displayed in the"ufu.exe" window.
12. Please retry it from 2 when it doesn’t so well.
13. Turn off the unit and end the ufu.exe.
    Disconnect the AC power cord of the unit.
    and the RS-232C cable.
14. Clear the memories.
    1) Connect the AC power cord of the unit
    2) Press “SETUP” button and “POWER” button.
    3) Then the receiver is turned on and displays“RESET[NO]”.
    4) Push “→” key and displays “RESET [RESET]”
    5) Then push “ENTER” key and displays “RESET? [OK]”.
    6) Push “ENTER” key and often a while “OK” is displayed.
15. Check the version.
    Following the procedures described in "Version indication" in "6.1 TEST MODE", check that the version has been changed to a new one.



Mode Select: ● Full ○ Easy

Check that "Full" is selected in MODE SELECT.



Firmware File: D:¥DVD¥Download¥UFU¥FIRMWARE¥DVR510HS¥R3AA176.sz0
File size: 13,887,215 byte
Date: 2004/03/11 10:53
Start Address: 00800000
End Address: 0112FFFF
CPU type: Unknown
FLASH Size: 128 Mbit
Byte swap: NO

Communication Port: ● COM1
Transmission Format: ● S ○ SZ0

Base Speed: ○ 9,600 ● 19,200 ○ 38,400 ○ 57,600 ○ 115,200
Data Send Speed: ○ 9,600 ○ 19,200 ○ 38,400 ● 57,600 ○ 115,200

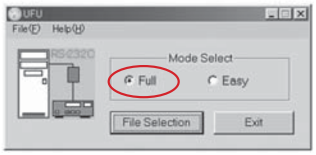
Step: User setting
Time: 00:00
Target device is connected

Select the communication speed.
- Basic speed: 19200
- Data transfer speed: 57600

2) DISP microcomputer

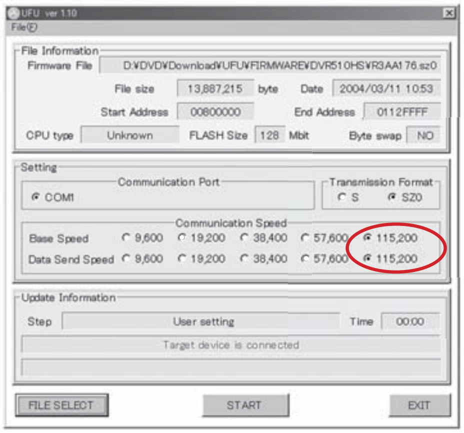
[Procedures]

1. Turn off the power to this unit by setting the main volume level to "---dB" and Multi-Zone to "OFF".
2. Connect the 232C cross cable and the PC, as indicated in "Connections".
3. Simultaneously press and hold the ENTER and MULTI-ZONE ON/OFF keys for about 5 seconds.
4. Turn the power ON at CONFIDENTIAL PANEL mode.
5. (DISP microcomputer)
   Press ↓ key and select "DISP DL [START]" display.
   Press ENTER key and set to "DISP DL [GO ON]".
6. Double-click on "ufu.exe: ver.1.10".
7. Check that "Full" is selected in MODE SELECT.
8. Select the firm ware file with "**sz0**" extension.
9. Select the communication speed.
   - Basic speed: 115200
   - Data transfer speed: 115200
10. Click on "START" button.
11. "Completed" is displayed in the"ufu.exe" window.
12. Please retry it from 2 when it doesn't so well.
13. Turn off the unit and end the ufu.exe.
    Disconnect the AC power cord of the unit.
    and the RS-232C cable.
14. Clear the memories.
    1) Connect the AC power cord of the unit
    2) Press "SETUP" button and "POWER" button.
    3) Then the receiver is turned on and displays "RESET [NO]".
    4) Push "→" key and displays "RESET [RESET]"
    5) Then push "ENTER" key and displays "RESET? [OK]".
    6) Push "ENTER" key and often a while "OK" is displayed.
15. Check the version.
    Following the procedures described in
    "Version indication" in "6.1 TEST MODE",
    check that the version has been changed to a new one.



Mode Select: ● Full ○ Easy

Check that "Full" is selected in MODE SELECT.



File Information
Firmware File: D:¥DVD¥Download¥UFU¥FIRMWARE¥DVR510HS¥R3AA176.sz0
File size: 13,887,215 byte
Date: 2004/03/11 10:53
Start Address: 00800000
End Address: 0112FFFF
CPU type: Unknown
FLASH Size: 128 Mbit
Byte swap: NO

Setting
Communication Port: ● COM1
Transmission Format: ○ S ● SZ0
Communication Speed
Base Speed: ○ 9,600 ○ 19,200 ○ 38,400 ○ 57,600 ● 115,200
Data Send Speed: ○ 9,600 ○ 19,200 ○ 38,400 ○ 57,600 ● 115,200

Update Information
Step: User setting
Time: 00:00
Target device is connected

Select the communication speed.
- Basic speed: 115200
- Data transfer speed: 115200

[2] DSP Flash Rom Update by USB Memory

[Preparations]

1. Copy the DSP Firmware for update to the USB MEMORY in advance.
   - * One file for DSP1 and DSP2
   - * Unable to update by the program except for 08 Mid receiver.
2. Connect the MONITOR OUT of this unit to DISPLAY.
3. Turn off the power to this unit by setting the main volume level to "---dB" and Multi-Zone to "OFF".
4. Connect the USB MEMORY to the iPod DIRECT USB terminal of this unit.

[Procedure]

1. Simultaneously press and hold POWER and RETURN keys for about 5 seconds.

2. The DSP firmware version is dislplayed automatically.
   Confirm the Version before the update.
   "f [*.***]   s [*.***] is displayed on the FL display. **(A)**
   f: DSP1 firmware
   s: DSP2 firmware

3. Select the "USB" on the monitor TV. **(B)**

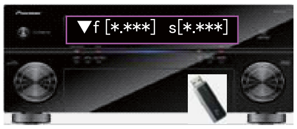
4. Select the file for Firmware update. **(C)**

5. The updating program starts and the HDMI indicator becomes flashing. **(D)**

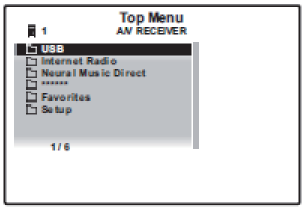
6. After about 2 minutes, the HDMI indicator stops flashing and the update is finished.
   Confirm "DSPF DL [OK]" is displayed on the FL dislay. **(E)**

7. Turn off the unit and disconnect the USB MEMORY.

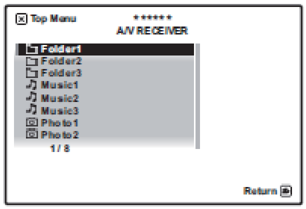
(A)



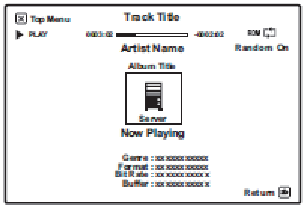
(B)


Top Menu
A/V RECEIVER
1
USB
Internet Radio
Neural Music Direct
******
Favorites
Setup
1 / 6

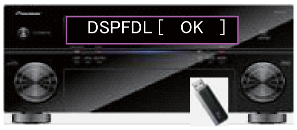
(C)


Top Menu
******
A/V RECEIVER
Folder1
Folder2
Folder3
Music1
Music2
Music3
Photo1
Photo2
1 / 8
Return

(D)


Top Menu
Track Title
PLAY
Artist Name
Random On
Album Title
Server
Now Playing
Genre : xx xxxx xxxxx
Format : xx xxxx xxxxx
Bit Rate : xx xxxx xxxx x
Buffer : xx xxxx xxxx x
Return

(E)

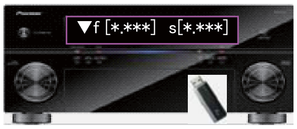


[Confirmation]

1. Simultaneously press and hold POWER and RETURN keys for about 5 seconds.

2. The DSP firmware version is dislplayed automatically.
   Confirm the Version after the update. **(F)**

(F)



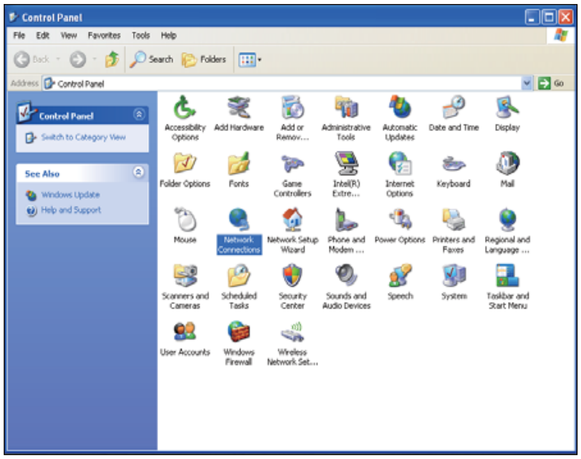
[3] Network Firmware Update Procedure

Note: Please prepare the firmware file in your PC before starting this procedure.

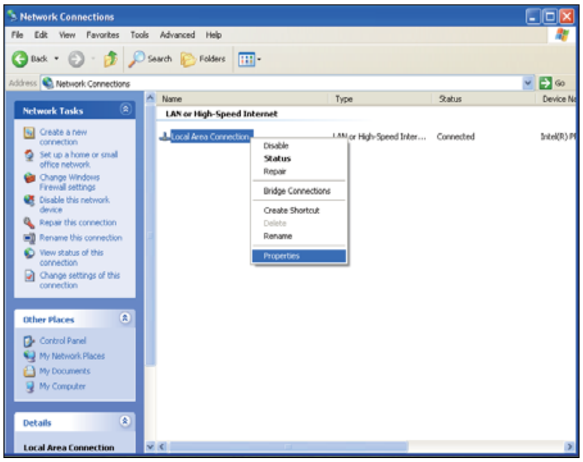
[Procedure]

1. Connect the LAN terminal on the AV receiver to the LAN terminal on PC with a LAN cable (cross or straight).
2. Set the Static IP Address of the PC.
   *When using the DHCP router, go to Step 3.
   It is not necessary to execute this Step 2 in that case.

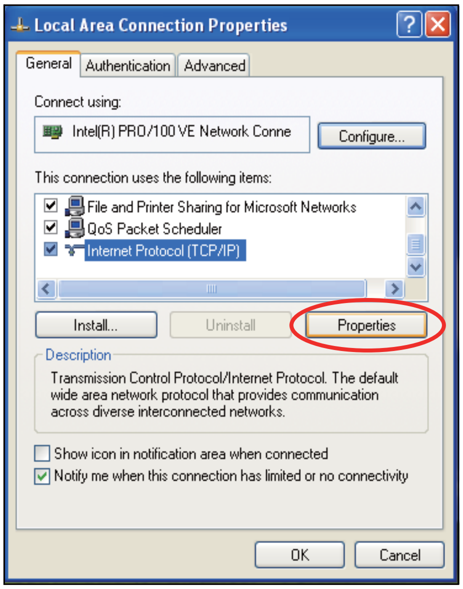
Open the Control Panel. --->
Open the Network Connections (double click).


Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel Go
Control Panel
Switch to Category View
See Also
Windows Update
Help and Support
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Automatic Updates
Date and Time
Display
Folder Options
Fonts
Game Controllers
Intel(R) Extre...
Internet Options
Keyboard
Mail
Mouse
Network Connections
Network Setup Wizard
Phone and Modem ...
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Security Center
Sounds and Audio Devices
Speech
System
Taskbar and Start Menu
User Accounts
Windows Firewall
Wireless Network Set...

Local Area Connection (right click) ---> Properties


Network Connections
File Edit View Favorites Tools Advanced Help
Back Search Folders
Address Network Connections Go
Network Tasks
Create a new connection
Set up a home or small office network
Change Windows Firewall settings
Disable this network device
Repair this connection
Rename this connection
View status of this connection
Change settings of this connection
Other Places
Control Panel
My Network Places
My Documents
My Computer
Details
Local Area Connection
Name
Type
Status
Device Na
LAN or High-Speed Internet
Local Area Connection
LAN or High-Speed Inter...
Connected
Intel(R) PR
Disable
Status
Repair
Bridge Connections
Create Shortcut
Delete
Rename
Properties

Local Area Connections Properties --->
Internet Protocol (TCP/IP) ---> Properties


Local Area Connection Properties
General
Authentication
Advanced
Install...
Uninstall
Properties
OK
Cancel
Configure...

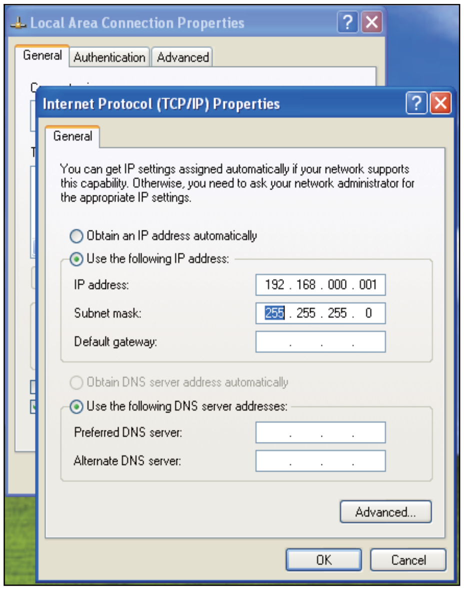
Connect using:
Intel(R) PRO/100 VE Network Conne

This connection uses the following items:
☑ File and Printer Sharing for Microsoft Networks
☑ QoS Packet Scheduler
☑ Internet Protocol (TCP/IP)

Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected
☑ Notify me when this connection has limited or no connectivity

Internet Protocol (TCP/IP) Properties


Local Area Connection Properties
General
Authentication
Advanced
Internet Protocol (TCP/IP) Properties
General
Advanced...
OK
Cancel

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
● Use the following IP address:
IP address: 192 . 168 . 000 . 001
Subnet mask: 255 . 255 . 255 . 0
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:
Preferred DNS server: . . .
Alternate DNS server: . . .

Set the following settings.

Use the following IP address:

IP address: 192.168.000.001
Subnet mask: 255.255.255.0

3. Set the Static IP Address of the AV receiver.

Note: Please confirm the Network IP settings of the customer's unit before changing the IP Address.
Home Media Gallery ---> Setup ---> NetworkSetup ---> NetworkFound ---> Static IP Address
If using the Static IP Address, please record it.

Home Media Gallery ---> Setup ---> NetworkSetup ---> NetworkFound ---> Static IP Address Change

Set the following settings.

IP address: 192.168.000.002
Subnet mask: 255.255.255.0
Gateway IP: 192.168.000.001
Proxy Server: No

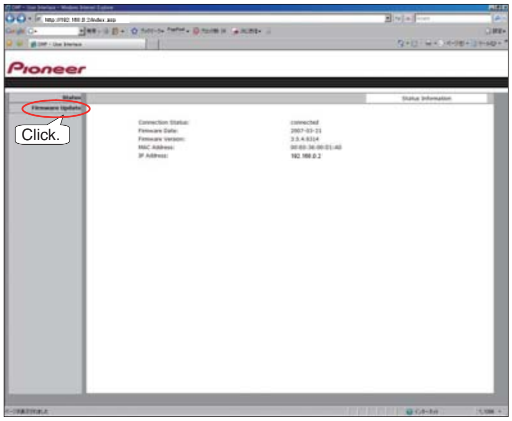
4. Open the Internet Explorer on the PC.

Enter the following address.

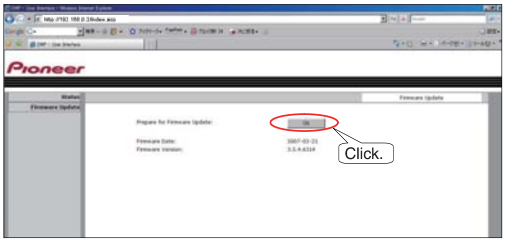
http:// 192.168.000.002

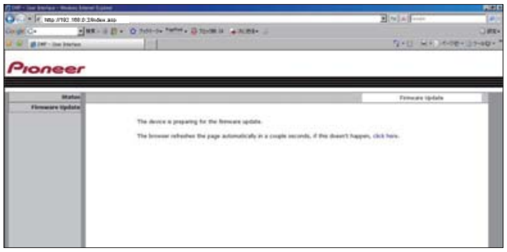
The following page will be appeared.

Click the Firmware Update.

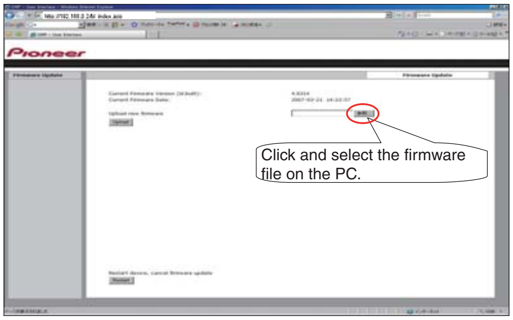


Click the Ok button.

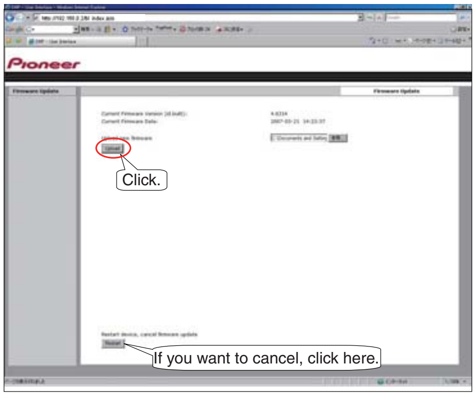




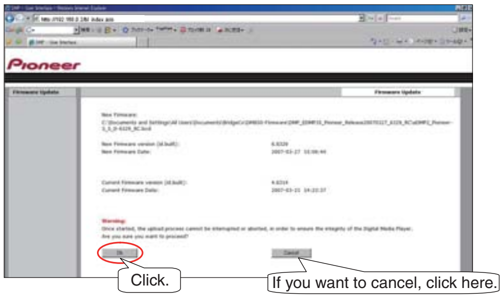
Click the browse button and select the firmware file in the PC.


Click and select the firmware file on the PC.

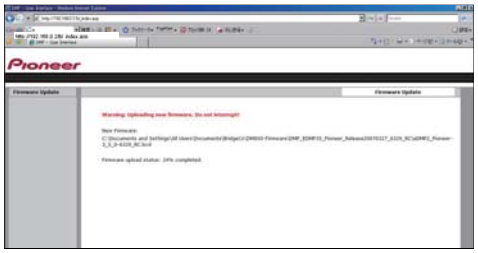
Click the Upload button.


Click.
If you want to cancel, click here.

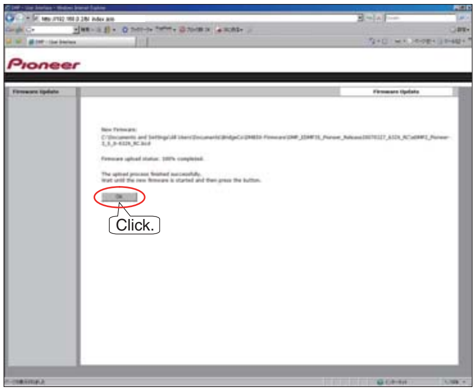
Click the Ok button.


Click.
If you want to cancel, click here.

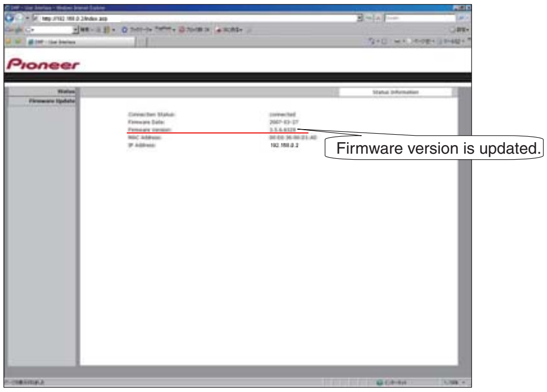
The firmware update will be started.



After the updating is completed, click the Ok button to return status page.



Confirm the Firmware Version.

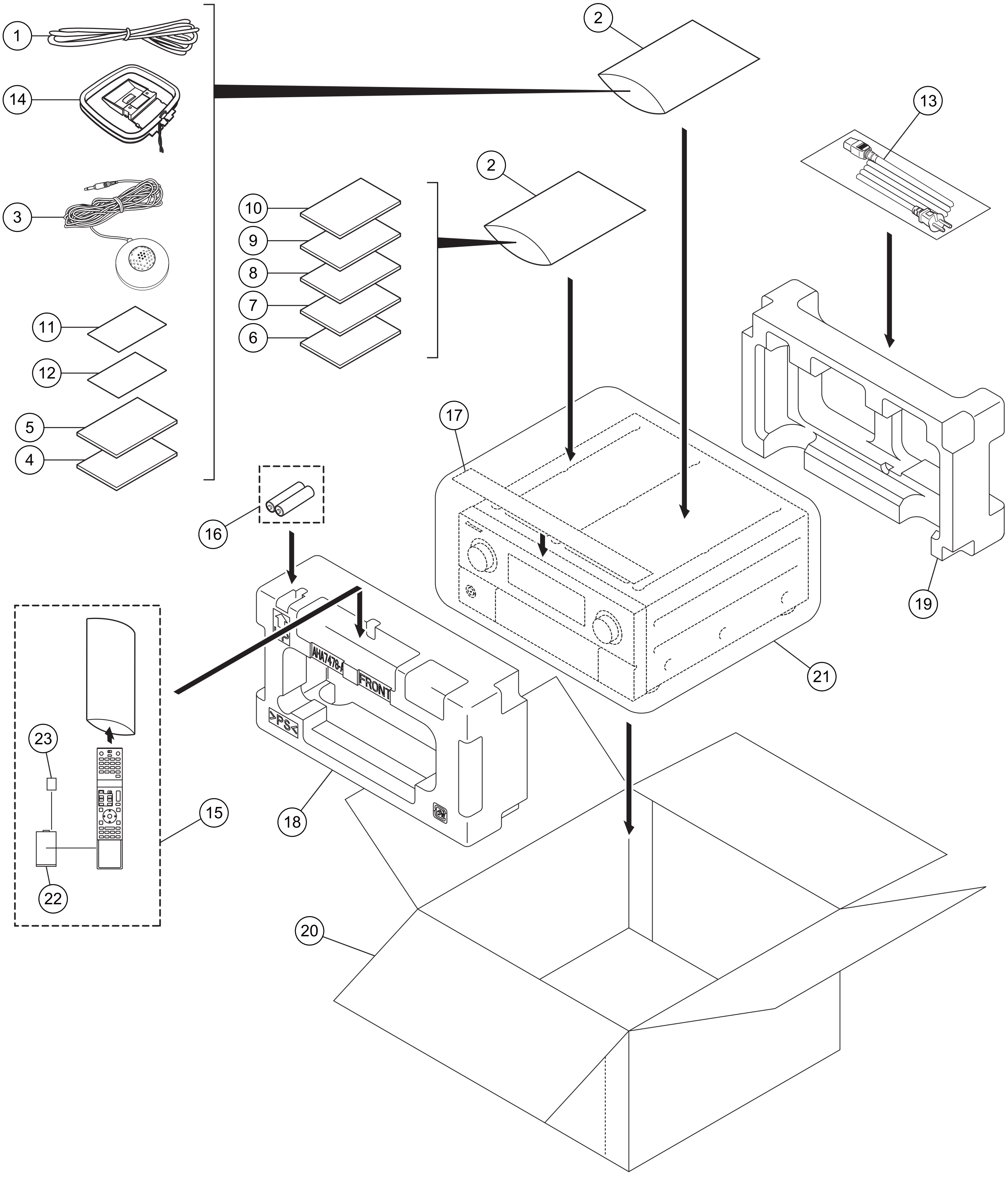

Firmware version is updated.

Note: Please restore the Network IP settings of the customer's unit after the update is completed.

9. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

9.1 PACKING SECTION

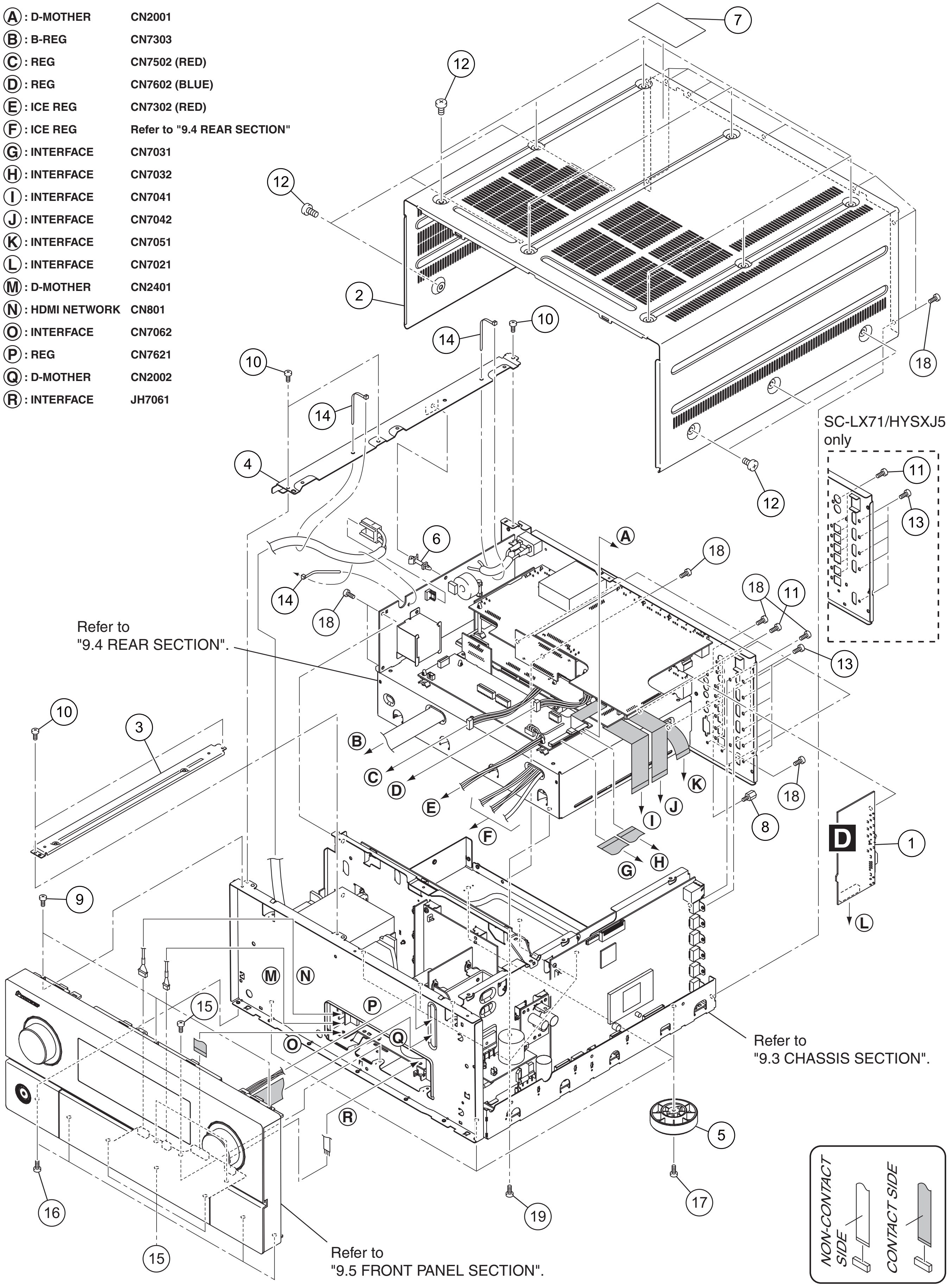

1
2
14
13
2
3
10
9
8
7
6
11
12
5
4
17
19
16
AHA7478-A
FRONT
PS
23
15
18
21
22
20

PACKING SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	FM Wire Antenna	ADH7030
NSP	2	Polyethylene Bag	AHG7117
	3	Setup Microphone (for Auto MCACC setup)	APM7008
	4	Operating Instructions (English)	ARB7393
	5	Operating Instructions (French)	ARC7799
	6	Operating Instructions (German)	ARC7800
	7	Operating Instructions (Italian)	ARC7801
	8	Operating Instructions (Spanish)	ARC7802
	9	Operating Instructions (Dutch)	ARC7803
	10	Operating Instructions (Russian)	ARC7804
	11	Caution Sheet SP,E	ARM7056
NSP	12	Warranty Card EU	ARY7128
⚠	13	AC Power Cord	ADG7062
	14	AM Loop Antenna	ATB7013
	15	Remote Control Unit	AXD7521
NSP	16	Dry Cell Battery AA/LR6	XEX3004
	17	Protection Sheet LX	AEH7030
	18	Front Pad 81	AHA7478
	19	Rear Pad 81	AHA7479
	20	Packing Case (SC-LX81)	AHD8603
	20	Packing Case (SC-LX71)	AHD8604
	21	Packing Sheet	RHC1023
	22	Battery Cover	AZN8031
	23	Label(WEEE)	ARW7322

9.2 EXTERIOR SECTION

Ⓐ	: D-MOTHER	CN2001
Ⓑ	: B-REG	CN7303
Ⓒ	: REG	CN7502 (RED)
Ⓓ	: REG	CN7602 (BLUE)
Ⓔ	: ICE REG	CN7302 (RED)
Ⓕ	: ICE REG	Refer to "9.4 REAR SECTION"
Ⓖ	: INTERFACE	CN7031
Ⓗ	: INTERFACE	CN7032
Ⓘ	: INTERFACE	CN7041
Ⓙ	: INTERFACE	CN7042
Ⓚ	: INTERFACE	CN7051
Ⓛ	: INTERFACE	CN7021
Ⓜ	: D-MOTHER	CN2401
Ⓝ	: HDMI NETWORK	CN801
Ⓞ	: INTERFACE	CN7062
Ⓟ	: REG	CN7621
Ⓠ	: D-MOTHER	CN2002
Ⓡ	: INTERFACE	JH7061


7
12
12
2
18
10
14
10
14
4
12
SC-LX71/HYSXJ5 only
11
13
A
18
6
18
11
14
18
13
10
3
B
C
D
E
K
J
I
18
8
F
G
H
D
1
L
9
M
N
15
P
O
Q
R
5
16
17
19
15
NON-CONTACT SIDE
CONTACT SIDE

Refer to "9.4 REAR SECTION".

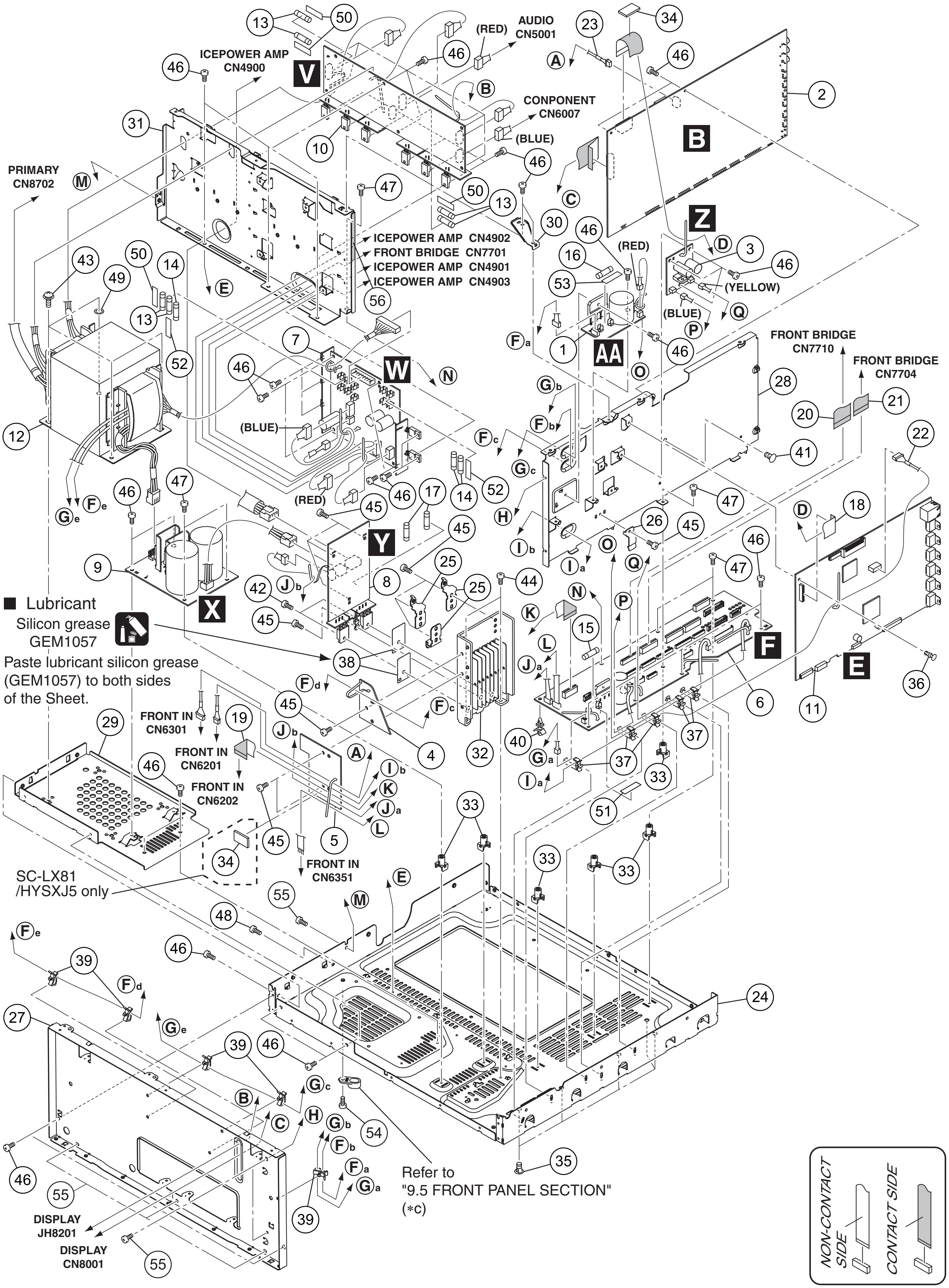
Refer to "9.3 CHASSIS SECTION".

Refer to "9.5 FRONT PANEL SECTION".

EXTERIOR SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	232C & CONTROL ASSY	AWX9209
	2	Bonnet 81B	AZN8036
	3	Center Beam V1	ANG7482
	4	Left Beam 81	ANG7624
	5	Insulator Assembly	DXA1904
	6	PCB Holder	PNW2562
	7	Lisence Label V5S	ARW7372
	8	Screw 2.85 x 7	ABA7078
	9	Screw	BBT30P080FCC
	10	Screw	BBZ30P080FCC
	11	Screw	BBZ30P080FTB
	12	Screw	BCZ40P060FTB
	13	Screw	BMZ30P040FTB
NSP	14	Binder (BK-1)	ZCA-BK1
	15	Screw	BBZ30P060FCC
	16	Screw	ABA1193
	17	Screw	ABZ30P080FTC
	18	Screw	ABA1011
	19	Screw	IBZ30P080FCC

9.3 CHASSIS SECTION



■ Lubricant

Silicon grease GEM1057

Paste lubricant silicon grease (GEM1057) to both sides of the Sheet.

SC-LX81 /HYSXJ5 only

Refer to "9.5 FRONT PANEL SECTION" (*c)

ICEPOWER AMP CN4900
AUDIO CN5001
(RED)
CONPONENT CN6007
(BLUE)
PRIMARY CN8702
ICEPOWER AMP CN4902
FRONT BRIDGE CN7701
ICEPOWER AMP CN4901
ICEPOWER AMP CN4903
(RED)
(YELLOW)
(BLUE)
FRONT BRIDGE CN7710
FRONT BRIDGE CN7704
(BLUE)
(RED)
FRONT IN CN6301
FRONT IN CN6201
FRONT IN CN6202
FRONT IN CN6351
DISPLAY JH8201
DISPLAY CN8001
V
B
Z
AA
W
Y
X
F
E
NON-CONTACT SIDE
CONTACT SIDE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56
A B C D E Fa Fb Fc Fd Fe Ga Gb Gc Ge H Ia Ib Ja Jb K L M N O P Q

EXTERIOR SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
⚠	1	HDMI RECT ASSY	AWX9156
	2	D-MOTHER ASSY	See Contrast table (2)
	3	DCDC ASSY	AWX9138
	4	H GUARD2 ASSY	AWX9147
	5	H GUARD1 ASSY	AWX9174
	6	INTERFACE ASSY	AWX9148
	7	ICE REG ASSY	AWX9149
	8	B REG ASSY	AWX9150
	9	B DIODE ASSY	AWX9171
	10	REG ASSY	AWX9152
	11	HDMI NETWORK ASSY	See Contrast table (2)
⚠	12	Power Transformer (T1501)	ATS7423
⚠	13	Fuse (FU13,FU14,FU21,FU22,FU31,FU32: 800mA)	REK1021
⚠	14	Fuse (FU11,FU12,FU15: 1A)	REK1022
⚠	15	Fuse (FU51: 1.6A)	REK1024
⚠	16	Fuse (FU41: 3.15A)	REK1027
⚠	17	Fuse (FU61,FU62: 10A)	REK1154
	18	22FFC/60V (J10)	ADD7655
	19	15FFC/60V (J13)	ADD7660
	20	27P FFC/60V (J15)	ADD7662
	21	19P FFC/60V (J16)	ADD7663
	22	5P Shielded Cable (J19)	ADX7621
	23	Housing Assy (Y21)	ADX7623
NSP	24	Under Base 81	ANA7210
	25	PCB Angle 45	ANG7406
NSP	26	Transistor Holder	ANG7543
NSP	27	Panel Stay 81	ANG7642
	28	DSP Shieled 81	ANG7622

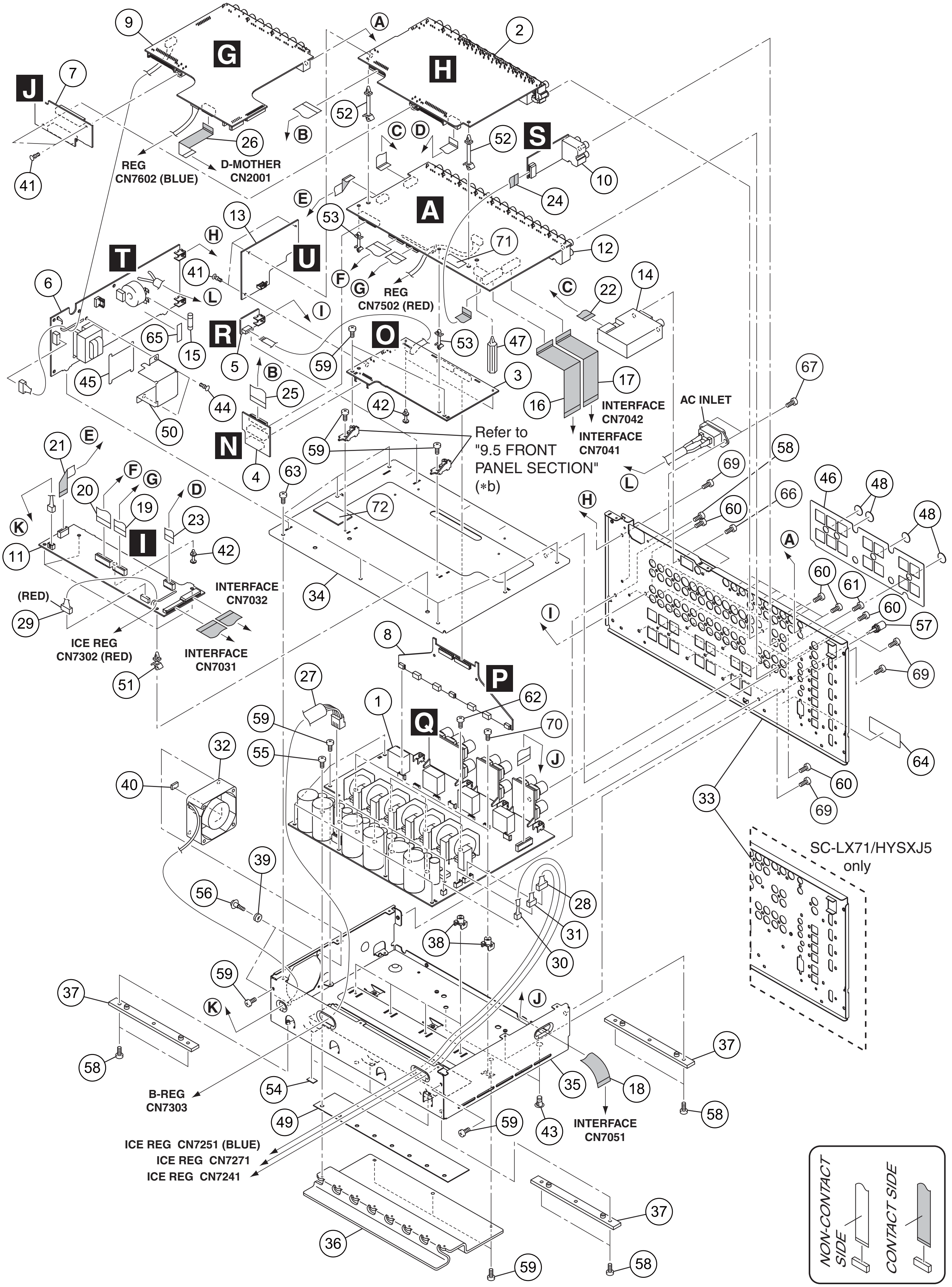
Mark	No.	Description	Part No.
	29	Trans Flame 81	ANG7623
	30	Support Plate 81	ANG7625
	31	REG Assy Plate 81	ANG7627
	32	REG Heatsink 81	ANH7204
	33	PCB Mold	AMR2533
	34	FFC Cushion	AEB7404
	35	PCB Holder	AEC7057
	36	Push Rivet	AEC7071
	37	Reuse Clamp	AEC7621
	38	Sheet	AEE7034
	39	Side Clamp	DEC2007
	40	Locking Card Spacer	PNW2917
NSP	41	PC Support	VEC1749
	42	Screw	ABA1052
	43	Screw 4 x 12	ABA7109
	44	Screw 3 x 10	ABA7134
	45	Screw	BBZ30P060FTC
	46	Screw	BBZ30P080FCC
	47	Screw	BBZ30P180FCC
	48	Screw	IBP30P090FCC
	49	Washer	WH40FNI
NSP	50	Fuse Card	AAX2367
NSP	51	Fuse Card	AAX2377
NSP	52	Fuse Card	AAX7293
NSP	53	Fuse Card	AAX7493
	54	Screw	ABZ30P080FTC
	55	Screw	ABA1011
	56	ACETATE TAPE 10X60	AEH7029

(2) CONTRAST TABLE

SC-LX81/HYSXJ5 and SC-LX71/HYSXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Mark	No.
	2	D-MOTHER ASSY	AWX9196	AWX9202
	11	HDMI NETWORK ASSY	AWX9234	AWX9235

9.4 REAR PANEL SECTION



9
G
A
2
H
J
7
52
B
C
D
52
S
26
REG
CN7602 (BLUE)
D-MOTHER
CN2001
10
41
24
E
13
53
A
T
H
U
71
12
6
41
F
G
REG
CN7502 (RED)
C
22
14
L
I
R
O
53
47
65
15
5
59
B
3
17
67
45
25
16
INTERFACE
CN7042
AC INLET
44
42
50
INTERFACE
CN7041
21
E
N
59
Refer to
"9.5 FRONT
PANEL SECTION"
(∗b)
58
F
63
L
69
20
G
19
D
4
H
46
48
K
23
72
60
66
48
11
I
42
A
INTERFACE
CN7032
34
60
61
(RED)
60
29
I
57
ICE REG
CN7302 (RED)
INTERFACE
CN7031
8
69
51
27
P
1
62
59
Q
70
64
55
J
32
60
40
33
69
SC-LX71/HYSXJ5
only
39
28
56
38
31
30
59
37
K
J
37
58
35
18
B-REG
CN7303
54
49
59
43
INTERFACE
CN7051
58
ICE REG CN7251 (BLUE)
ICE REG CN7271
ICE REG CN7241
37
36
59
58
NON-CONTACT
SIDE
CONTACT SIDE

EXTERIOR SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	ICEPOWER AMP Assy	AWH7017
	2	COMPOSITE S ASSY	AWX9144
	3	ICE BUFFER ASSY	AWX9145
	4	PRE BRIDGE ASSY	AWX9146
	5	ICE SHIELD ASSY	AWX9173
⚠	6	PRIMARY ASSY	AWX9166
	7	V-BRIDGE ASSY	AWX9161
	8	ICE INTERFACE ASSY	AWX9137
	9	COMPONENT ASSY	See Contrast table (2)
	10	ZOUT ASSY	AWX9143
	11	FRONT BRIDGE ASSY	AWX9155
	12	AUDIO ASSY	AWX9206
	13	PRIMARY GUARD ASSY	AWX9172
	14	FM/AM TUNER UNIT	AXX7248
⚠	15	FUSE (FU1: 5A)	REK1029
	16	21P FFC/60V (J2)	ADD7645
	17	19P FFC/60V (J3)	ADD7646
	18	17P FFC/60V (J4)	ADD7647
	19	13P FFC/60V (J5)	ADD7648
	20	17P FFC/60V (J6)	ADD7649
	21	9P FFC/60V (J7)	ADD7650
	22	11P FFC/60V (J8)	ADD7651
	23	9P FFC/60V (J9)	ADD7652
	24	11FFC/60V (J11)	ADD7658
	25	19FFC/60V (J12)	ADD7659
	26	16FFC/60V (J14)	ADD7661
	27	4P Housing Assy (Y20)	ADX7622
	28	6P Housing Assy (Y22)	ADX7655
	29	6P Housing Assy (Y23)	ADX7656
	30	2P Housing Assy (Y24)	ADX7657
	31	4P Housing Assy (Y25)	ADX7677
⚠	32	DC Fan Motor	AXM7040
	33	Rear Panel	See Contrast table (2)
NSP	34	ICE COVER 81	ANF7047
NSP	35	ICE BOX 81	ANF7052
NSP	36	Heatsink 81	ANH7202
	37	Insulator ICE	AMR7523

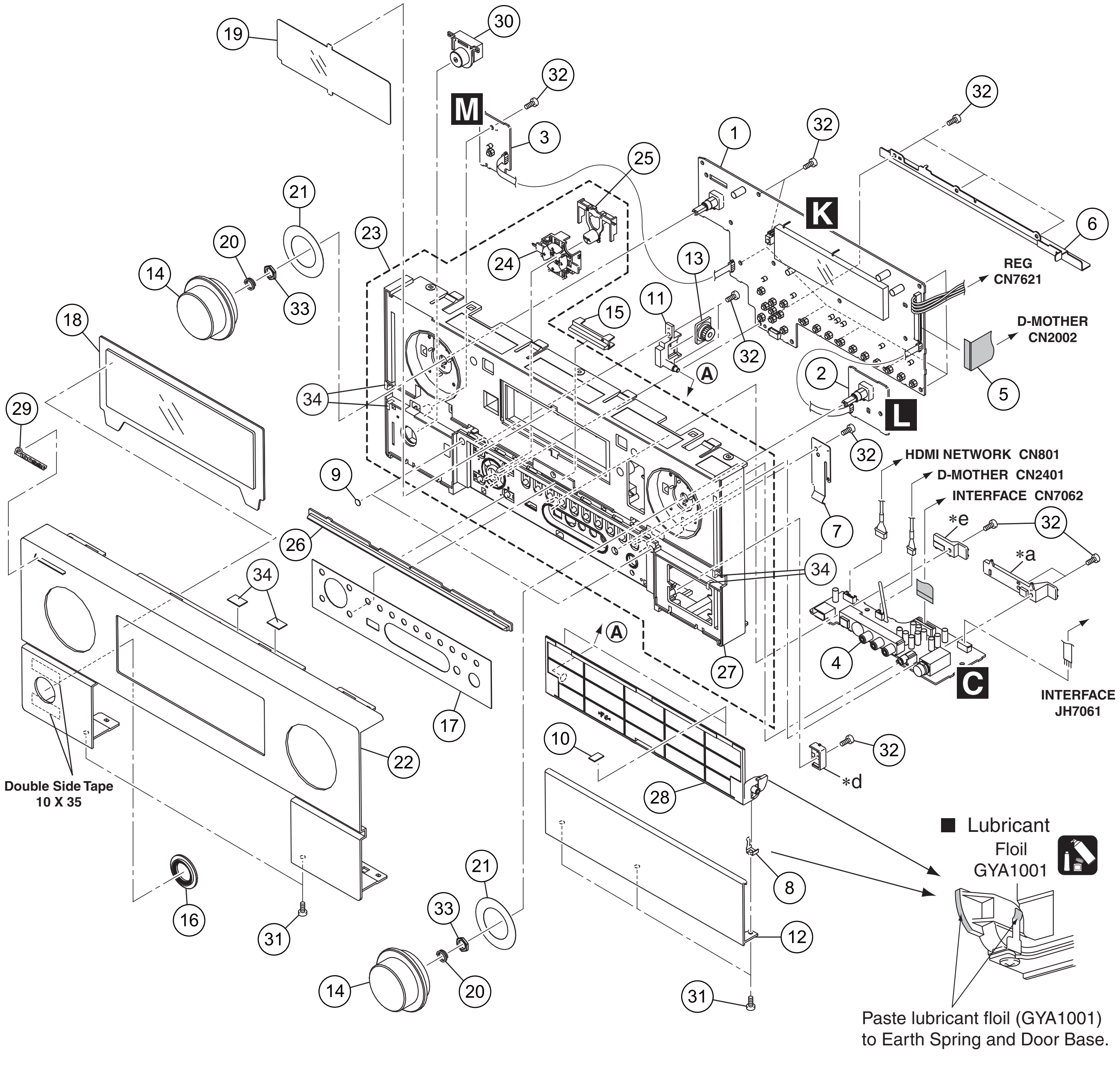
Mark	No.	Description	Part No.
	38	PCB Mold	AMR7536
	39	Damper Bushing	AEB7396
	40	Cushion 5 x 8	AEB7397
	41	Push Rivet	AEC7071
	42	PCB Spacer	AEC7080
	43	Card Spacer	AEC7133
	44	Nylon Rivet	AEC7406
	45	Primary Barrier	AEC7569
	46	SP Sheet 81	AEC7599
	47	Card Spacer 18K	AEC7613
	48	Cushion Circle 14B	AED7081
	49	Radiation Sheet A	AEE7064
	50	Shield Case	AMR7526
NSP	51	PCB Holder	PNW2100
NSP	52	Spacer 40	PNW2488
NSP	53	PCB Holder	REC1220
	54	Cushion 11 x 7	AED7092
	55	Screw 3 x 10	ABA7134
	56	Screw	ABA7146
	57	Terminal Screw	AKE-031-0
	58	Screw	BBZ30P060FCC
	59	Screw	BBZ30P080FCC
	60	Screw	BBZ30P080FTB
	61	Screw	BBZ30P100FCC
	62	Screw	BBZ30P140FCC
	63	Screw	AMZ30P060FTC
NSP	64	Label	VRW1629
NSP	65	Fuse Card	AAX7098
	66	Screw	ABA1207
	67	Screw	CBZ30P080FTB
	68	••••••	
	69	Screw	ABA1011
	70	Screw	IBZ30P150FCC
	71	ACETATE TAPE 10X35	AEH7032
	72	CUSHION T3 20X35	AEB7406

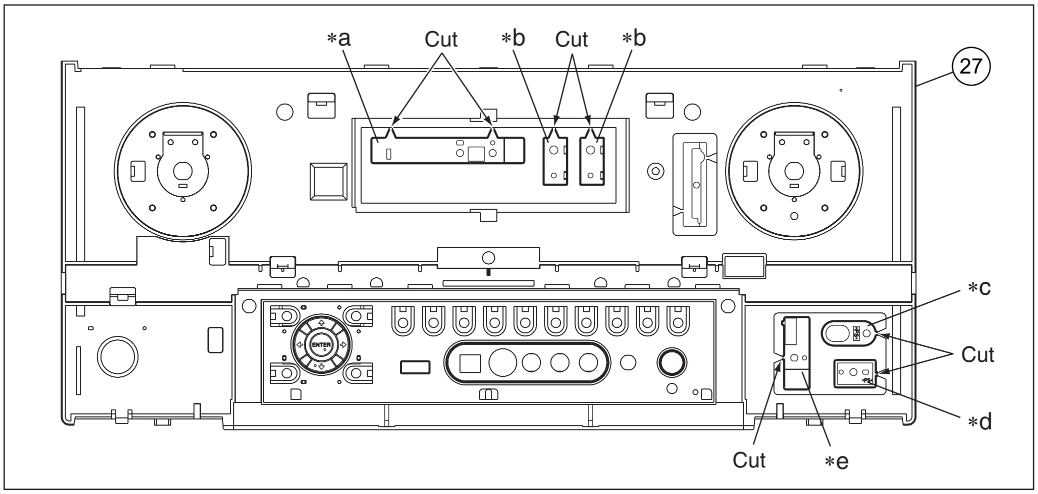
(2) CONTRAST TABLE

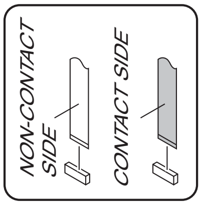
SC-LX81/HYSXJ5 and SC-LX71/HYSXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Mark	No.
	9	COMPONENT ASSY	AWX9141	AWX9211
	33	Rear Panel	ANC8526	ANC8533

9.5 FRONT PANEL SECTION


19
30
32
M
3
32
1
32
25
21
K
6
20
23
REG
CN7621
14
33
24
13
11
18
15
D-MOTHER
CN2002
32
A
2
34
5
29
L
9
32
HDMI NETWORK CN801
D-MOTHER CN2401
INTERFACE CN7062
7
26
*e
32
34
*a
34
A
27
4
C
17
INTERFACE
JH7061
10
22
32
Double Side Tape
10 X 35
*d
28
Lubricant
Floil
GYA1001
21
8
16
33
31
12
14
20
31
Paste lubricant floil (GYA1001)
to Earth Spring and Door Base.


*a
Cut
*b
Cut
*b
27
*c
ENTER
Cut
*d
Cut
*e


NON-CONTACT SIDE
CONTACT SIDE

EXTERIOR SECTION SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	DISPLAY ASSY	See Contrast table (2)
	2	VOL ASSY	AWX9159
	3	POWER SW ASSY	AWX9160
	4	FRONT IN ASSY	AWX9142
	5	29FFC/60V (J18)	ADD7665
	6	Panel Beam 81	ANG7620
	7	Door Spring	ABK7061
	8	Earth Spring 81	ABK7067
	9	Cushion Circle 6B	AED7083
	10	Cushion 11 x 7	AED7092
	11	Door Shaft 60	AMR7531
	12	Door Panel 81HY	ANB7490
	13	Damper Assy	AXA7156
	14	Vol.Knob B	AAA7052
	15	IB Lens V5SEL	AAK8430
	16	Power Ring LX	AAK8427
	17	Door Sheet 81HY	AAK8439
	18	Display Panel 81HY	AAK8442
	19	Filter 81HY	AAK8459
	20	Vol Ring 60	ABH7249
	21	Knob Spacer 74	AEC7558
	22	Front Panel	See Contrast table (2)
	23	P Base 81HY Assy	AZN8038
NSP	24	+-Button 81	AAD7788
NSP	25	Enter Button 81	AAD7789
	26	Center Lens V5SH	AAK8428
NSP	27	Panel Base 81HY	AMB7988
	28	Door Base 81	AMR7540
	29	Pioneer Badge	VAM1158
	30	STANDBY BTN LXHY Assy	AAD7773
	31	Screw	BBZ30P080FTB
	32	Screw	BBZ30P100FNI
	33	Nut	NK90FTC
NSP	34	TAPE	PNM1249

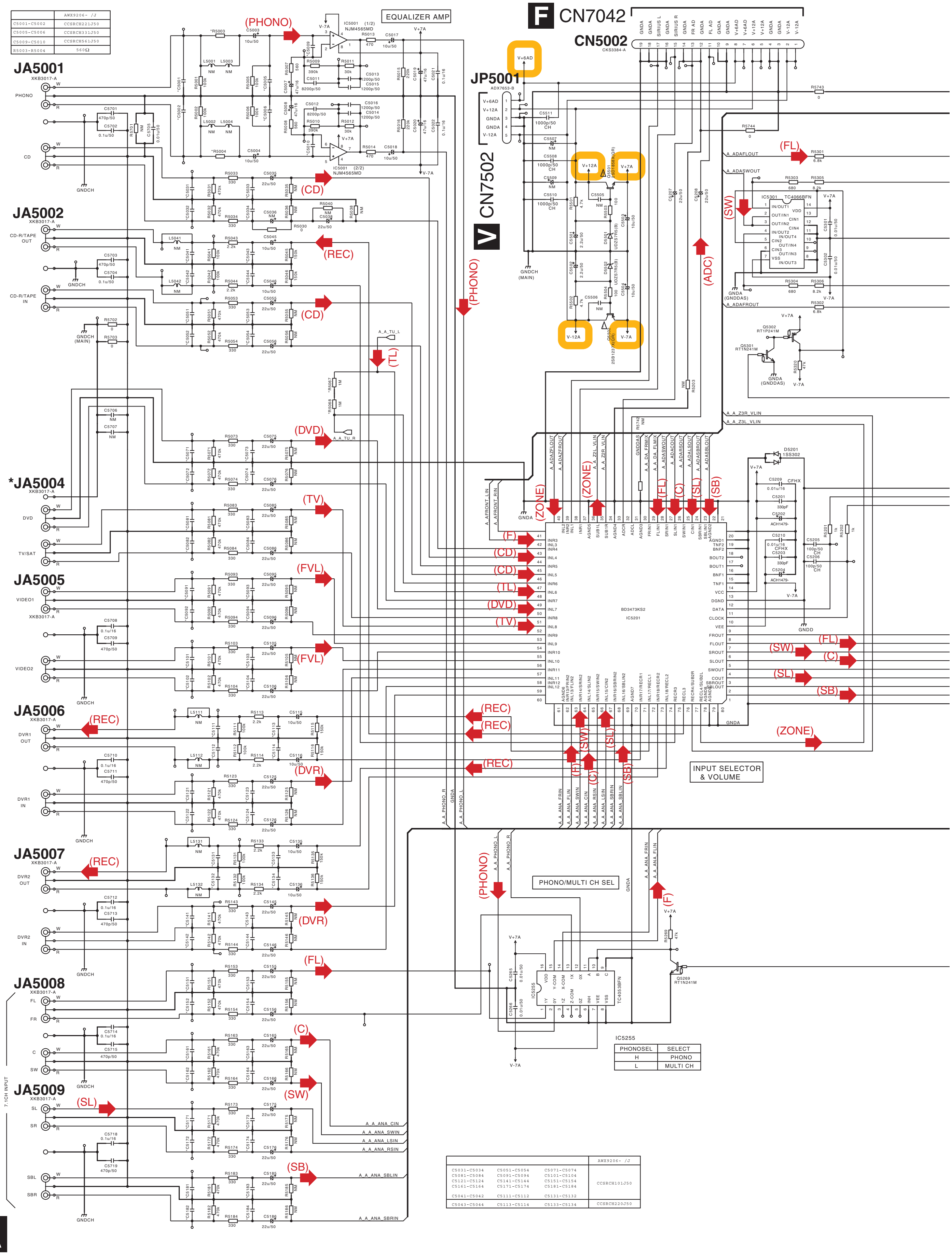
(2) CONTRAST TABLE

SC-LX81/HYSXJ5 and SC-LX71/HYSXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Mark	No.
	1	DISPLAY ASSY	AWX9158	AWX9238
	22	Front Panel	ANB7483	ANB7487

10. SCHEMATIC DIAGRAM

10.1 AUDIO ASSY



EQUALIZER AMP
(PHONO)
IC5001 (1/2) NJM4565MD
IC5001 (2/2) NJM4565MD
JA5001
XKB3017-A
PHONO
CD
JA5002
CD-R/TAPE OUT
CD-R/TAPE IN
*JA5004
DVD
TV/SAT
JA5005
VIDEO1
VIDEO2
JA5006
DVR1 OUT
DVR1 IN
JA5007
DVR2 OUT
DVR2 IN
JA5008
FL
FR
C
SW
JA5009
SL
SR
SBL
SBR
7.1CH INPUT
GNDCH
F CN7042
CN5002
CKS3384-A
JP5001
ADX7653-B
V CN7502
V+6AD
V+12A
V-12A
V+7A
V-7A
(CD)
(REC)
(DVD)
(TV)
(FVL)
(DVR)
(FL)
(C)
(SW)
(SL)
(SB)
(TL)
(ZONE)
(ADC)
(F)
IC5201
BD3473KS2
INPUT SELECTOR & VOLUME
IC5301 TC4066BFN
Q5301 RT1N241M
Q5302 RT1P241M
D5201 1SS302
PHONO/MULTI CH SEL
IC5255
TC4053BFN
Q5269 RT1N241M

	AWX9206- /J
C5001-C5002	CCSRCH221J50
C5005-C5006	CCSRCH331J50
C5009-C5010	CCSRCH561J50
R5003-R5004	560Ω

IC5255	
PHONOSEL	SELECT
H	PHONO
L	MULTI CH

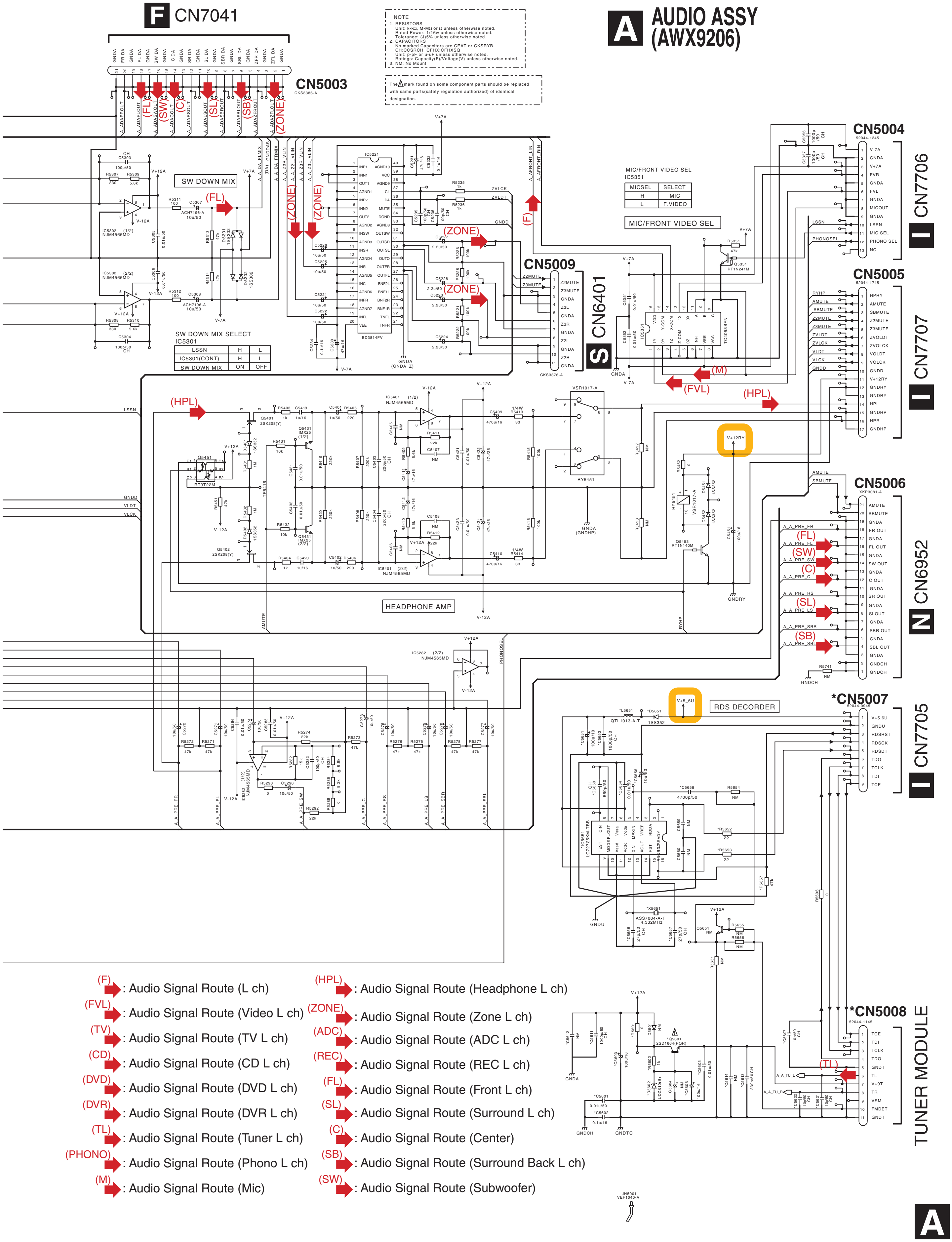
	AWX9206- /J
C5031-C5034 C5051-C5054 C5071-C5074 C5081-C5084 C5091-C5094 C5101-C5104 C5121-C5124 C5141-C5144 C5151-C5154 C5161-C5164 C5171-C5174 C5181-C5184 C5041-C5042 C5111-C5112 C5131-C5132	CCSRCH101J50
C5043-C5044 C5113-C5114 C5133-C5134	CCSRCH220J50

A

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
CH:CCSRCH CFHX:CFHXSQ
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

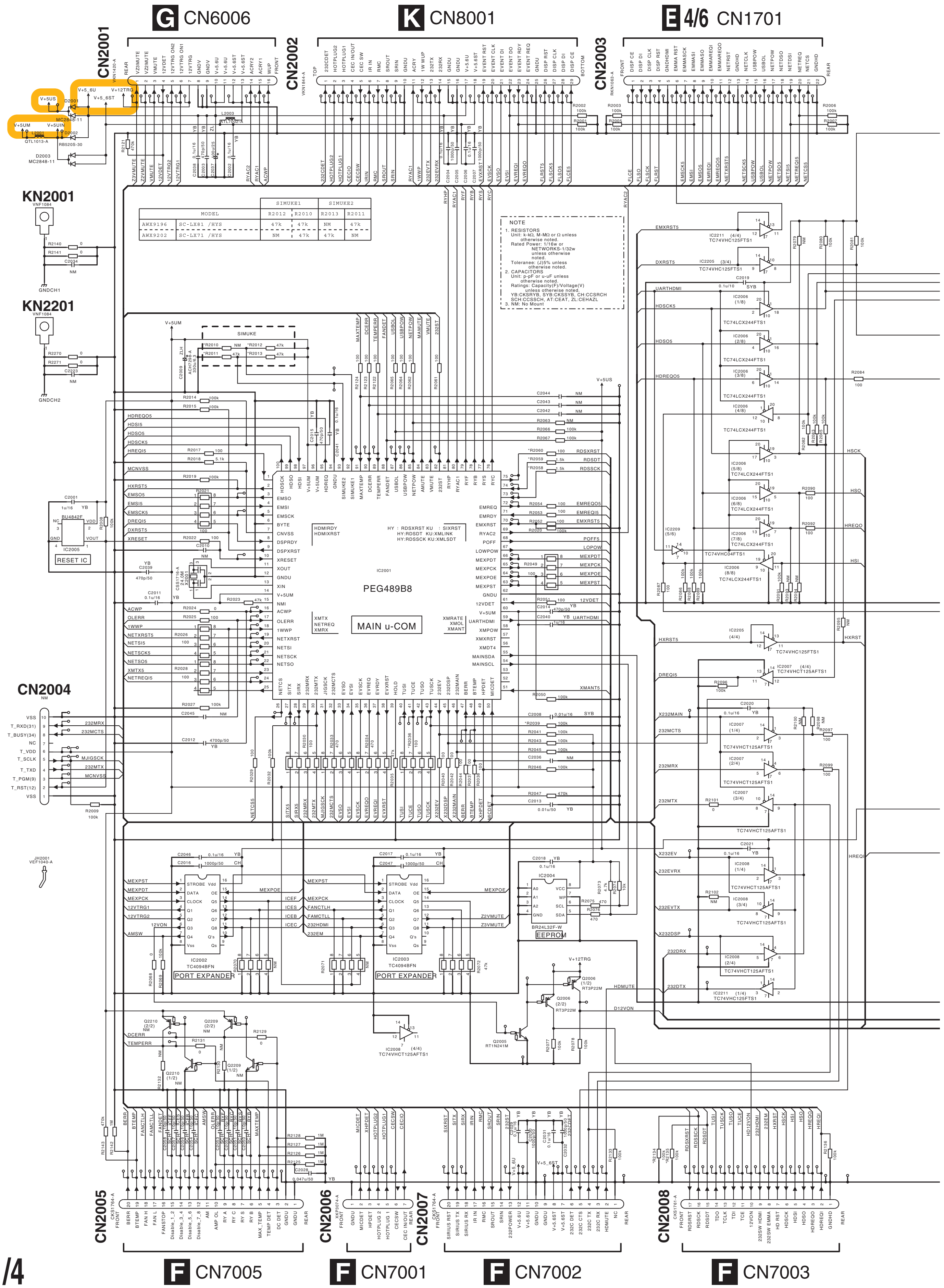
A AUDIO ASSY (AWX9206)


F CN7041
CN5003
CKS3386-A
SW DOWN MIX
SW DOWN MIX SELECT
IC5301
LSSN | H | L
IC5301(CONT) | H | L
SW DOWN MIX | ON | OFF
IC5221
BD3814FV
CN5009
CKS3376-A
S CN6401
MIC/FRONT VIDEO SEL
IC5351
MICSEL | SELECT
H | MIC
L | F.VIDEO
TC4053BFN
CN5004
52044-1345
I CN7706
CN5005
52044-1745
I CN7707
HEADPHONE AMP
IC5401 NJM4565MD
RY5451
VSR1017-A
V+12RY
CN5006
XKP3081-A
N CN6952
IC5282 NJM4565MD
RDS DECORDER
V+5_6U
*CN5007
52044-0945
I CN7705
IC5651 LC72725KM-TBB
*CN5008
52044-1145
TUNER MODULE
JH5001 VEF1040-A
(FL)
(SW)
(C)
(SL)
(SB)
(ZONE)
(F)
(HPL)
(M)
(FVL)
(TL)

(F) ➡: Audio Signal Route (L ch)
(FVL) ➡: Audio Signal Route (Video L ch)
(TV) ➡: Audio Signal Route (TV L ch)
(CD) ➡: Audio Signal Route (CD L ch)
(DVD) ➡: Audio Signal Route (DVD L ch)
(DVR) ➡: Audio Signal Route (DVR L ch)
(TL) ➡: Audio Signal Route (Tuner L ch)
(PHONO) ➡: Audio Signal Route (Phono L ch)
(M) ➡: Audio Signal Route (Mic)

(HPL) ➡: Audio Signal Route (Headphone L ch)
(ZONE) ➡: Audio Signal Route (Zone L ch)
(ADC) ➡: Audio Signal Route (ADC L ch)
(REC) ➡: Audio Signal Route (REC L ch)
(FL) ➡: Audio Signal Route (Front L ch)
(SL) ➡: Audio Signal Route (Surround L ch)
(C) ➡: Audio Signal Route (Center)
(SB) ➡: Audio Signal Route (Surround Back L ch)
(SW) ➡: Audio Signal Route (Subwoofer)

10.2 D-MOTHER ASSY (1/4)


G CN6006
K CN8001
E 4/6 CN1701
CN2001
CN2002
CN2003
KN2001
KN2201
CN2004
IC2001
PEG489B8
MAIN u-COM
IC2005
BU4842F
RESET IC
IC2002
TC4094BFN
PORT EXPANDER
IC2003
TC4094BFN
PORT EXPANDER
IC2004
BR24L32F-W
EEPROM
IC2006
TC74LCX244FTS1
IC2007
TC74VHCT125AFTS1
IC2008
TC74VHCT125AFTS1
IC2205
TC74VHC125FTS1
IC2211
TC74VHC125FTS1
IC2209
TC74VHC04FTS1
SIMUKE
CN2005
CN2006
CN2007
CN2008
F CN7005
F CN7001
F CN7002
F CN7003

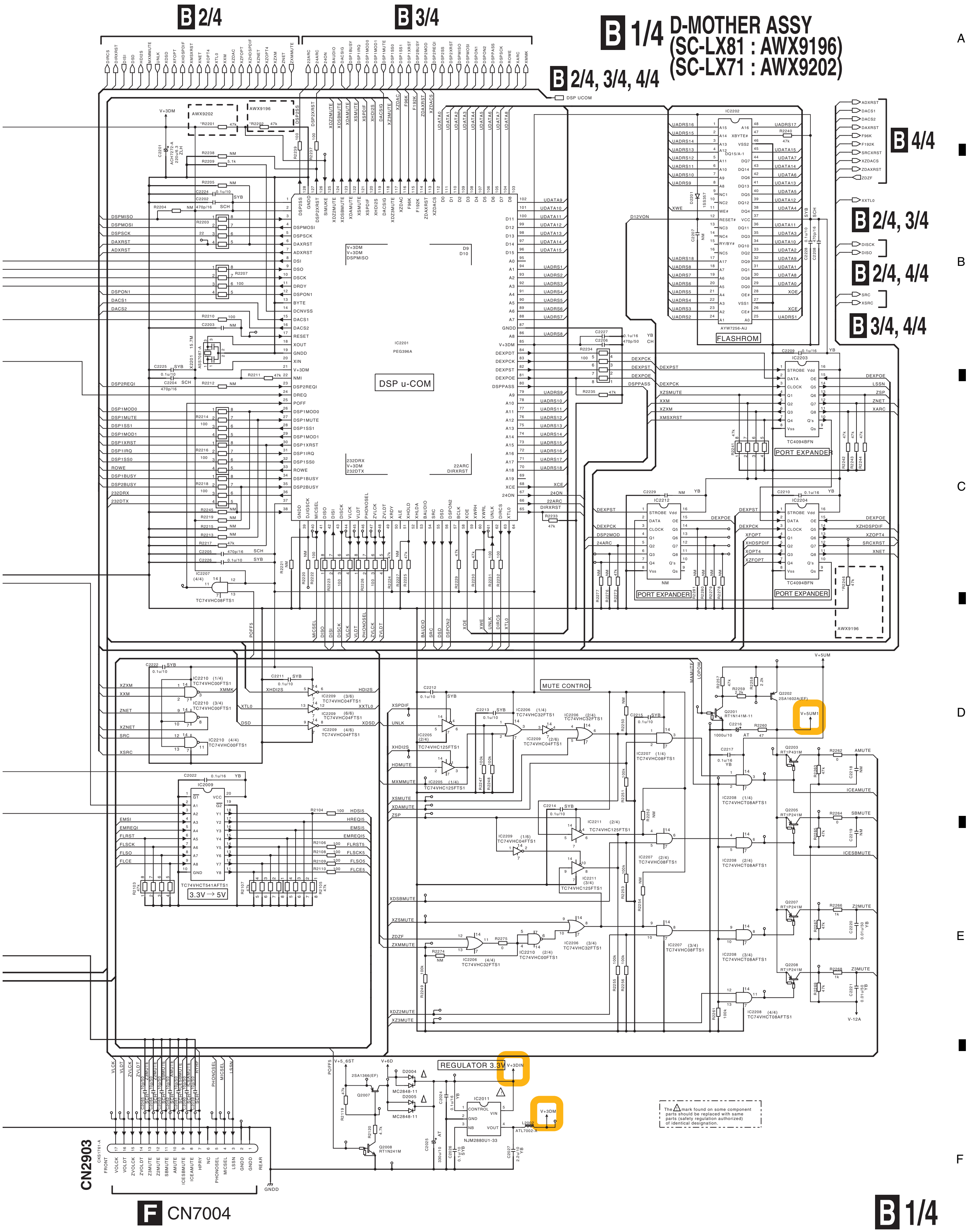
		SIMUKE1		SIMUKE2	
MODEL		R2012	R2010	R2013	R2011
AWX9196	SC-LX81 /HYS	47k	47k	NM	47k
AWX9202	SC-LX71 /HYS	NM	47k	47k	NM

NOTE

1. RESISTORS
   Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
   Rated Power: 1/16w or NETWORKS-1/32w unless otherwise noted.
   Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
   Unit: p-pF or u-uF unless otherwise noted.
   Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
   YB:CKSRYB, SYB:CKSSYB, CH:CCSRCH
   SCH:CCSSCH, AT:CEAT, ZL:CEHAZL
3. NM: No Mount

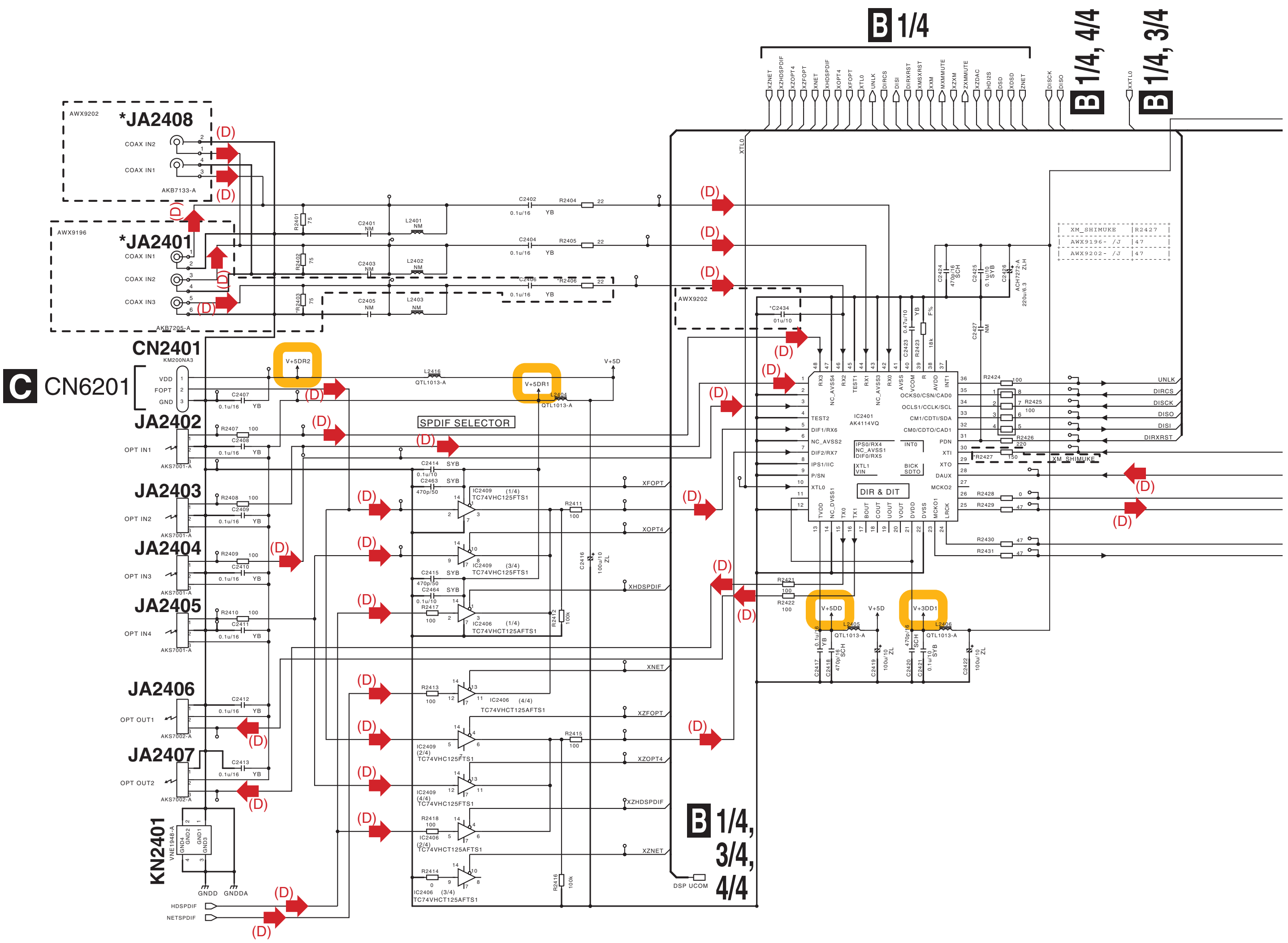
B 1/4

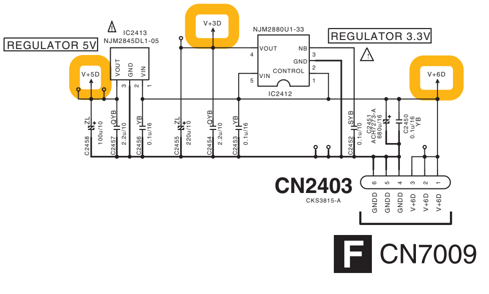
B 1/4 D-MOTHER ASSY
(SC-LX81 : AWX9196)
(SC-LX71 : AWX9202)



B 2/4
B 3/4
B 2/4, 3/4, 4/4
DSP UCOM
B 4/4
B 2/4, 3/4
B 2/4, 4/4
B 3/4, 4/4
AWX9202
AWX9196
IC2201
PEG396A
DSP u-COM
IC2202
AYW7256-A/J
FLASHROM
IC2203
TC4094BFN
PORT EXPANDER
IC2204
TC4094BFN
PORT EXPANDER
IC2212
PORT EXPANDER
IC2210 (1/4) TC74VHC00FTS1
IC2209 (3/6) TC74VHC04FTS1
IC2009
TC74VHCT541AFTS1
3.3V → 5V
MUTE CONTROL
IC2206 (1/4) TC74VHC32FTS1
IC2207 (1/4) TC74VHC08FTS1
IC2208 (1/4) TC74VHCT08AFTS1
IC2211 (2/4) TC74VHC125FTS1
Q2201 RT1N141M-11
Q2202 2SA1602A(EF)
Q2203 RT1P431M
Q2205 RT1P241M
Q2207 RT1P241M
Q2208 RT1P241M
V+5UM
V+5UM1
AMUTE
ICEAMUTE
SBMUTE
ICESBMUTE
Z2MUTE
Z3MUTE
V-12A
REGULATOR 3.3V
V+3DIN
V+3DM
IC2011
NJM2880U1-33
Q2007 2SA1366(EF)
Q2008 RT1N241M
D2004 MC2848-11
D2005 MC2848-11
L2003 ATL7002-A
CN2903
CKS1761-A
FRONT
VOLCK
VOLDT
ZVOLCK
ZVOLDT
Z3MUTE
Z2MUTE
SBMUTE
AMUTE
ICESBMUTE
ICEAMUTE
HPRY
NC
PHONOSEL
MICSEL
LSSN
GNDD
GNDD
REAR
F CN7004
The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

10.3 D-MOTHER ASSY (2/4)


B 1/4
B 1/4, 4/4
B 1/4, 3/4
XZNET
XZHDSPDIF
XZOPT4
XZFOPT
XNET
XHDSPDIF
XOPT4
XFOPT
XTL0
UNLK
DIRCS
DISI
DIRXRST
XMEXRST
XXM
MXMMUTE
XZXM
ZXMMUTE
XZDAC
HDI2S
DSD
XDSD
ZNET
DISCK
DISO
XXTL0
AWX9202
*JA2408
COAX IN2
COAX IN1
AKB7133-A
AWX9196
*JA2401
COAX IN1
COAX IN2
COAX IN3
AKB7205-A
(D)
CN2401
KM200NA3
C CN6201
VDD
FOPT
GND
V+5DR2
V+5DR1
V+5D
L2416
QTL1013-A
L2404
QTL1013-A
JA2402
OPT IN1
AKS7001-A
SPDIF SELECTOR
JA2403
OPT IN2
JA2404
OPT IN3
JA2405
OPT IN4
JA2406
OPT OUT1
AKS7002-A
JA2407
OPT OUT2
KN2401
VNE1948-A
GNDD
GNDDA
HDSPDIF
NETSPDIF
C2401
C2402
C2403
C2404
C2405
C2406
C2407
C2408
C2409
C2410
C2411
C2412
C2413
C2414
C2415
C2416
C2463
C2464
R2401
R2402
R2403
R2404
R2405
R2406
R2407
R2408
R2409
R2410
R2411
R2412
R2413
R2414
R2415
R2416
R2417
R2418
L2401
L2402
L2403
IC2409 (1/4) TC74VHC125FTS1
IC2409 (3/4) TC74VHC125FTS1
IC2406 (1/4) TC74VHCT125AFTS1
IC2406 (4/4) TC74VHCT125AFTS1
IC2409 (2/4) TC74VHC125FTS1
IC2409 (4/4) TC74VHC125FTS1
IC2406 (2/4) TC74VHCT125AFTS1
IC2406 (3/4) TC74VHCT125AFTS1
XFOPT
XOPT4
XHDSPDIF
XNET
XZFOPT
XZOPT4
XZHDSPDIF
XZNET
DSP UCOM
B 1/4, 3/4, 4/4
IC2401
AK4114VQ
DIR & DIT
RX3
NC_AVSS4
RX2
TEST1
RX1
NC_AVSS3
RX0
AVSS
VCOM
R
AVDD
INT1
TEST2
DIF1/RX6
NC_AVSS2
DIF2/RX7
IPS1/IIC
P/SN
XTL0
OCKS0/CSN/CAD0
OCLS1/CCLK/SCL
CM1/CDTI/SDA
CM0/CDTO/CAD1
PDN
XTI
XTO
DAUX
MCKO2
BICK
SDTO
LRCK
MCKO1
DVSS
DVDD
VOUT
UOUT
COUT
BOUT
TX1
TX0
NC_DVSS1
TVDD
IPS0/RX4
NC_AVSS1
DIF0/RX5
XTL1
VIN
INT0
*C2434
C2417
C2418
C2419
C2420
C2421
C2422
C2423
C2424
C2425
C2426
C2427
R2421
R2422
R2423
R2424
R2425
R2426
R2427
R2428
R2429
R2430
R2431
V+5DD
V+3DD1
L2405
L2406
XM_SHIMUKE
R2427
AWX9196- /J 47
AWX9202- /J 47
UNLK
DIRCS
DISCK
DISO
DISI
DIRXRST

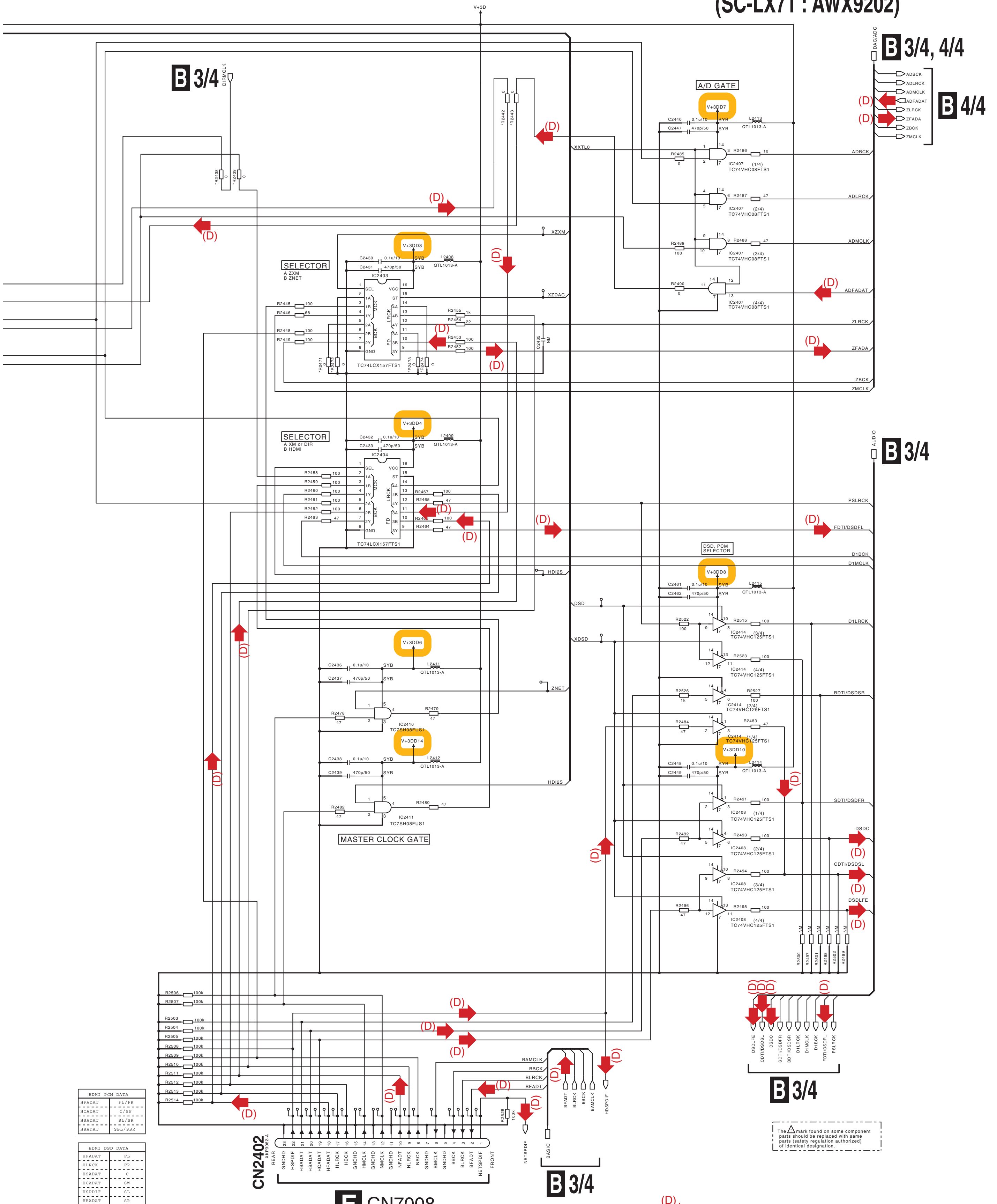

REGULATOR 5V
IC2413
NJM2845DL1-05
VOUT
GND
VIN
V+5D
V+3D
NJM2880U1-33
REGULATOR 3.3V
VOUT
NB
GND
VIN
CONTROL
IC2412
V+6D
C2458
C2457
C2456
C2455
C2454
C2453
C2452
C2451
C2450
CN2403
CKS3815-A
GNDD
V+6D
F CN7009

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w or NETWORKS-1/32w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB, SYB:CKSSYB, SCH:CCSSCH, ZL:CEHAZL
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

B 2/4

B 2/4 D-MOTHER ASSY (SC-LX81 : AWX9196) (SC-LX71 : AWX9202)


V+3D
B 3/4
DIRMCLK
B 3/4, 4/4
DAC/ADC
B 4/4
ADBCK
ADLRCK
ADMCLK
ADFADAT
ZLRCK
ZFADA
ZBCK
ZMCLK
A/D GATE
V+3DD7
C2440 0.1u/10
C2447 470p/50
L2413 QTL1013-A
XXTL0
R2485 0
R2486 10
IC2407 (1/4) TC74VHC08FTS1
R2487 47
IC2407 (2/4) TC74VHC08FTS1
R2489 100
R2488 47
IC2407 (3/4) TC74VHC08FTS1
R2490 0
IC2407 (4/4) TC74VHC08FTS1
XZXM
SELECTOR
A ZXM
B ZNET
V+3DD3
C2430 0.1u/10
C2431 470p/50
L2408 QTL1013-A
IC2403
XZDAC
R2445 100
R2446 68
R2448 100
R2449 100
R2455 1k
R2454 22
R2453 100
R2452 100
C2435 NM
TC74LCX157FTS1
R2442
R2443
R2438
R2439
R2471
R2472
R2473
R2474
SELECTOR
A XM or DIR
B HDMI
V+3DD4
C2432 0.1u/10
C2433 470p/50
L2409 QTL1013-A
IC2404
R2458 100
R2459 100
R2460 100
R2461 100
R2462 100
R2463 47
R2467 100
R2465 47
R2466 100
R2464 47
TC74LCX157FTS1
B 3/4
AUDIO
PSLRCK
FDTI/DSDFL
D1BCK
D1MCLK
D1LRCK
BDTI/DSDSR
SDTI/DSDFR
DSDC
CDTI/DSDSL
DSDLFE
HDI2S
DSD
XDSD
DSD, PCM SELECTOR
V+3DD8
C2461 0.1u/10
C2462 470p/50
L2415 QTL1013-A
R2522 100
R2515 100
IC2414 (3/4) TC74VHC125FTS1
R2523 100
IC2414 (4/4) TC74VHC125FTS1
R2526 1k
R2527 100
IC2414 (2/4) TC74VHC125FTS1
R2484 47
R2483 47
IC2414 (1/4) TC74VHC125FTS1
V+3DD10
C2448 0.1u/10
C2449 470p/50
L2414 QTL1013-A
R2491 100
IC2408 (1/4) TC74VHC125FTS1
R2492 47
R2493 100
IC2408 (2/4) TC74VHC125FTS1
R2494 100
IC2408 (3/4) TC74VHC125FTS1
R2496 47
R2495 100
IC2408 (4/4) TC74VHC125FTS1
R2500 R2497 R2501 R2498 R2502 R2499 NM
V+3DD6
C2436 0.1u/10
C2437 470p/50
L2411 QTL1013-A
ZNET
R2478 47
R2479 47
IC2410 TC7SH08FUS1
V+3DD14
C2438 0.1u/10
C2439 470p/50
L2412 QTL1013-A
R2482 47
R2480 47
IC2411 TC7SH08FUS1
MASTER CLOCK GATE
R2506 100k
R2507 100k
R2503 100k
R2504 100k
R2505 100k
R2508 100k
R2509 100k
R2510 100k
R2511 100k
R2512 100k
R2513 100k
R2514 100k
BAMCLK
BBCK
BLRCK
BFADT
R2528 100k
CN2402 XKP3082-A
REAR
GNDHD HSPDIF HBADAT HSADAT HCADAT HFADAT HLRCK HBCK GNDHD HMCLK GNDHD GNDHD NFADT NLRCK NBCK GNDHD BMCLK GNDHD BBCK BLRCK BFADT NETSPDIF
FRONT
F CN7008
NETSPDIF
BASIC
BFADT BLRCK BBCK BAMCLK
HDSPDIF
B 3/4
DSDLFE CDTI/DSDSL DSDC SDTI/DSDFR BDTI/DSDSR D1LRCK D1MCLK D1BCK FDTI/DSDFL PSLRCK
B 3/4
(D)

HDMI PCM DATA	
HFADAT	FL/FR
HCADAT	C/SW
HSADAT	SL/SR
HBADAT	SBL/SBR

HDMI DSD DATA	
HFADAT	FL
HLRCK	FR
HSADAT	C
HCADAT	SW
HSPDIF	SL
HBADAT	SR

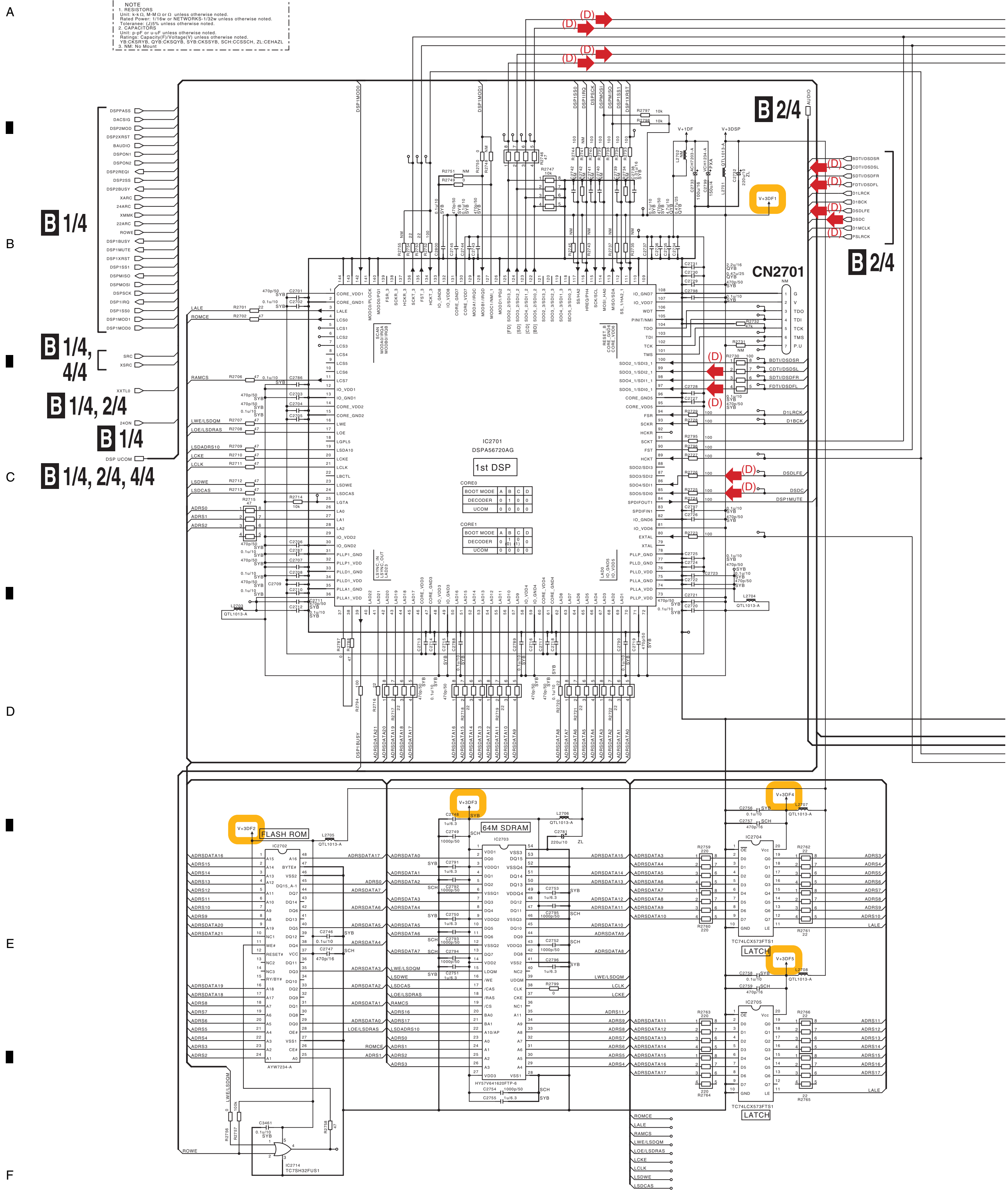
The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

(D) ➡ : Audio Data Route

B 2/4

10.4 D-MOTHER ASSY (3/4)

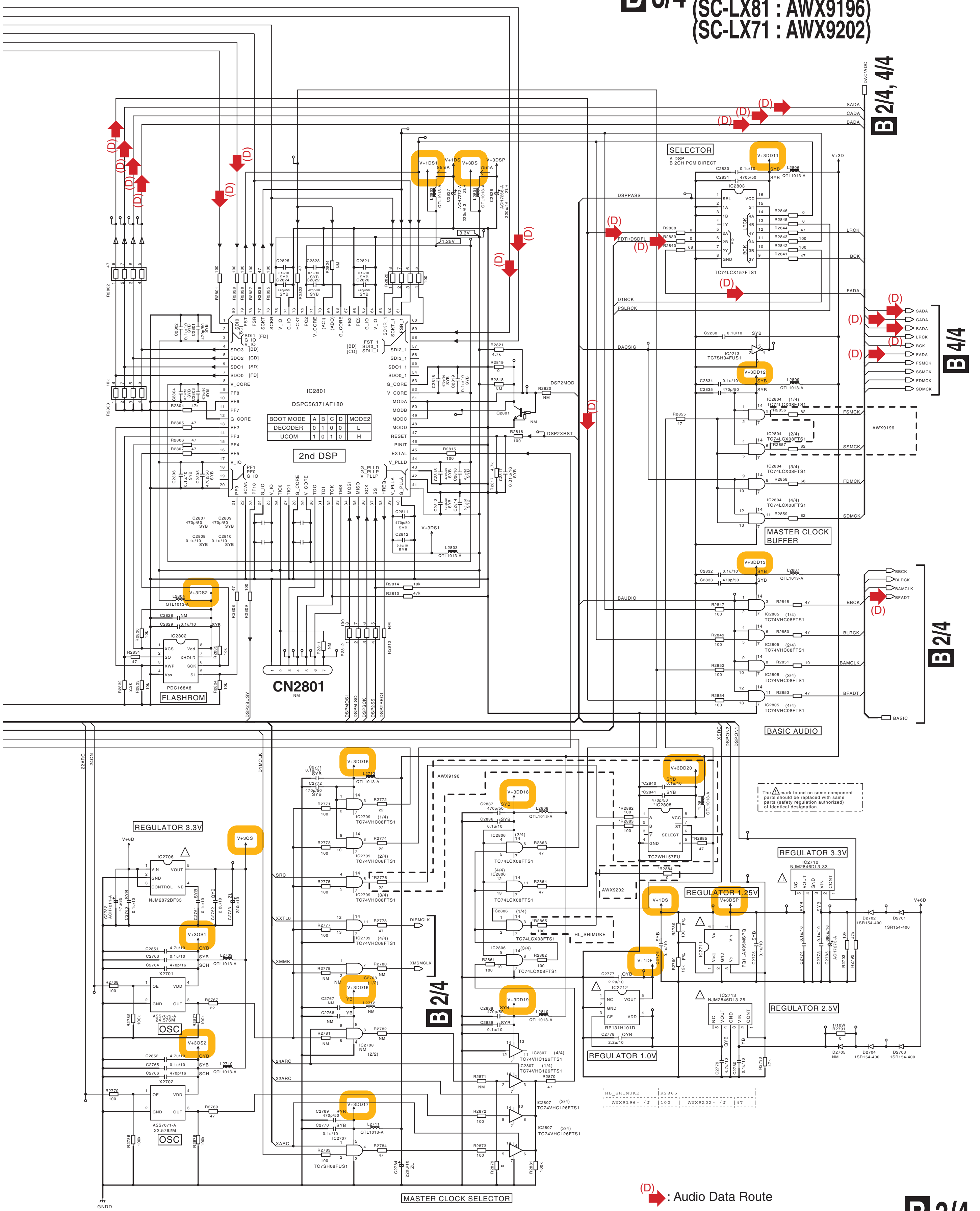
NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w or NETWORKS-1/32w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB, SYB:CKSSYB, SCH:CCSSCH, ZL:CEHAZL
3. NM: No Mount



1
2
3
4
A
B
C
D
E
F
B 1/4
B 1/4, 4/4
B 1/4, 2/4
B 1/4
B 1/4, 2/4, 4/4
B 2/4
B 2/4
DSPPASS
DACSIG
DSP2MOD
DSP2XRST
BAUDIO
DSPON1
DSPON2
DSP2REQI
DSP2SS
DSP2BUSY
XARC
24ARC
XMMK
22ARC
ROWE
DSP1BUSY
DSP1MUTE
DSP1XRST
DSP1SS1
DSPMISO
DSPMOSI
DSPSCK
DSP1IRQ
DSP1SS0
DSP1MOD1
DSP1MOD0
SRC
XSRC
XXTL0
24ON
DSP UCOM
(D)
V+1DF
V+3DSP
V+3DF1
V+3DF2
V+3DF3
V+3DF4
V+3DF5
AUDIO
CN2701
NM
BDTI/DSDSR
CDTI/DSDSL
SDTI/DSDFR
FDTI/DSDFL
D1LRCK
D1BCK
DSDLFE
DSDC
D1MCLK
PSLRCK
DSP1MUTE
IC2701
DSPA56720AG
1st DSP
CORE0
BOOT MODE
DECODER
UCOM
CORE1
IC2702
FLASH ROM
AYW7234-A
IC2703
64M SDRAM
HY57V641620FTP-6
IC2704
IC2705
TC74LCX573FTS1
LATCH
IC2714
TC7SH32FUS1
QTL1013-A
ROMCE
LALE
RAMCS
LWE/LSDQM
LOE/LSDRAS
LCKE
LCLK
LSDWE
LSDCAS

B 3/4

B 3/4 D-MOTHER ASSY (SC-LX81 : AWX9196) (SC-LX71 : AWX9202)



B 2/4, 4/4
DAC/ADC
SADA
CADA
BADA
(D)
SELECTOR
A DSP
B 2CH PCM DIRECT
IC2803
TC74LCX157FTS1
DSPPASS
FDTI/DSDFL
D1BCK
PSLRCK
DACSIG
LRCK
BCK
FADA
B 4/4
FSMCK
SSMCK
FDMCK
SDMCK
IC2213
TC7SH04FUS1
IC2804 TC74LCX08FTS1
AWX9196
MASTER CLOCK BUFFER
BBCK
BLRCK
BAMCLK
BFADT
BASIC
B 2/4
BAUDIO
IC2805 TC74VHC08FTS1
BASIC AUDIO
IC2801
DSPC56371AF180
BOOT MODE | A | B | C | D | MODE2
DECODER | 0 | 1 | 0 | 0 | L
UCOM | 1 | 0 | 1 | 0 | H
2nd DSP
DSP2MODE
DSP2XRST
V+1DS1
V+1DS
V+3DS
V+3DSP
V+3DD11
V+3DD12
V+3DD13
V+3DS2
IC2802
PDC168A8
FLASHROM
CN2801
DSP2BUSY
DSPMOSI
DSPMISO
DSPSCK
DSPSS
DSP2REQ
22ARC
24ON
D1MCLK
XSRC
DSPON2
DSPON1
REGULATOR 3.3V
IC2706
NJM2872BF33
V+6D
V+3OS
V+3OS1
V+3OS2
X2701
ASS7072-A 24.576M
OSC
X2702
ASS7071-A 22.5792M
OSC
V+3DD15
V+3DD16
V+3DD17
V+3DD18
V+3DD19
V+3DD20
SRC
XXTLO
XMMK
24ARC
22ARC
XARC
IC2709 TC74VHC08FTS1
IC2708
IC2707 TC7SH08FUS1
DIRMCLK
XMSMCLK
B 2/4
IC2806 TC74LCX08FTS1
HL_SHIMUKE
IC2808 TC7WH157FU
IC2807 TC74VHC126FTS1
AWX9202
MASTER CLOCK SELECTOR
REGULATOR 3.3V
IC2710 NJM2846DL3-33
REGULATOR 1.25V
V+1DS
V+3DSP
IC2711 PQ1LAX95MSPQ
V+1DF
IC2712 RP131H101D
REGULATOR 1.0V
IC2713 NJM2846DL3-25
REGULATOR 2.5V
V+6D
GNDD

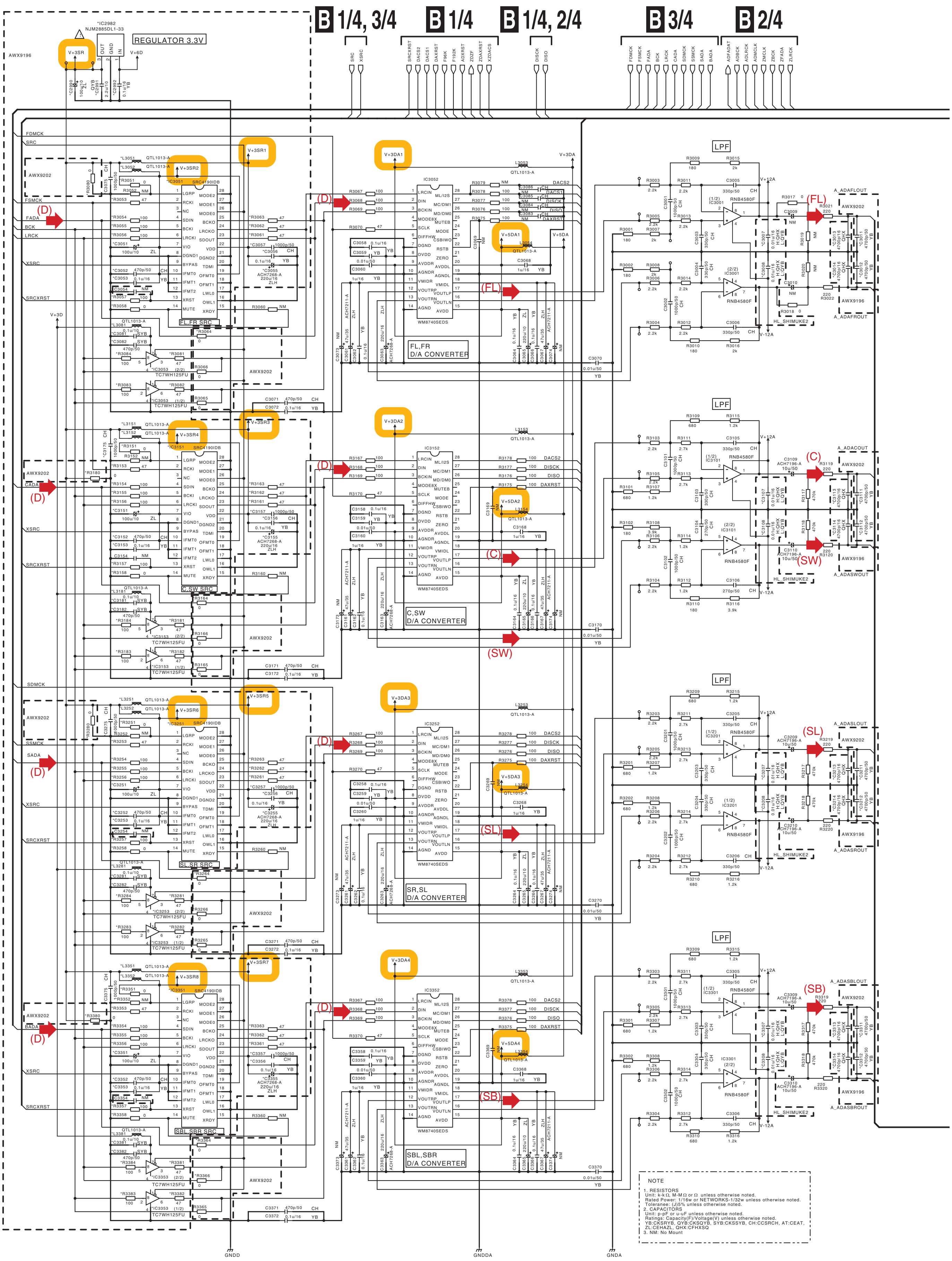
The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

HL_SHIMUKE	R2865
AWX9196-/J	100
AWX9202-/J	47

(D) : Audio Data Route

B 3/4

10.5 D-MOTHER ASSY (4/4)


A
B
C
D
E
F
B 1/4, 3/4
B 1/4
B 1/4, 2/4
B 3/4
B 2/4
SRC
XSRC
SRCXRST
DACS2
DACS1
DAXRST
F96K
F192K
ADXRST
ZDZF
XZDACS
DISCK
DISO
FDMCK
FSMCK
FADA
BCK
LRCK
CADA
SDMCK
SSMCK
SADA
BADA
ADFADAT
ADBCK
ADLRCK
ZMCLK
ZBCK
ZFADA
ZLRCK
*IC2982
NJM2885DL1-33
REGULATOR 3.3V
V+3SR
V+6D
AWX9196
AWX9202
V+3SR1
V+3SR2
V+3SR3
V+3SR4
V+3SR5
V+3SR6
V+3SR7
V+3SR8
V+3DA1
V+3DA2
V+3DA3
V+3DA4
V+5DA1
V+5DA2
V+5DA3
V+5DA4
V+3D
V+12A
V-12A
*IC3051 SRC4190IDB
*IC3151 SRC4190IDB
*IC3251 SRC4190IDB
*IC3351 SRC4190IDB
FL,FR SRC
C,SW SRC
SL,SR SRC
SBL,SBR SRC
TC7WH125FU
IC3052
IC3152
IC3252
IC3352
WM8740SEDS
FL,FR
D/A CONVERTER
C,SW
D/A CONVERTER
SR,SL
D/A CONVERTER
SBL,SBR
D/A CONVERTER
LPF
RNB4580F
IC3001
IC3101
IC3201
IC3301
HL_SHIMUKE2
A_ADAFLOUT
A_ADAFROUT
A_ADACOUT
A_ADASWOUT
A_ADASLOUT
A_ADASROUT
A_ADASBLOUT
A_ADASBROUT
(D)
(FL)
(C)
(SW)
(SL)
(SB)
QTL1013-A
GNDD
GNDDA
GNDA

NOTE

1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w or NETWORKS-1/32w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB, SYB:CKSSYB, CH:CCSRCH, AT:CEAT,
ZL:CEHAZL, QHX:CFHXSQ
3. NM: No Mount

B 4/4

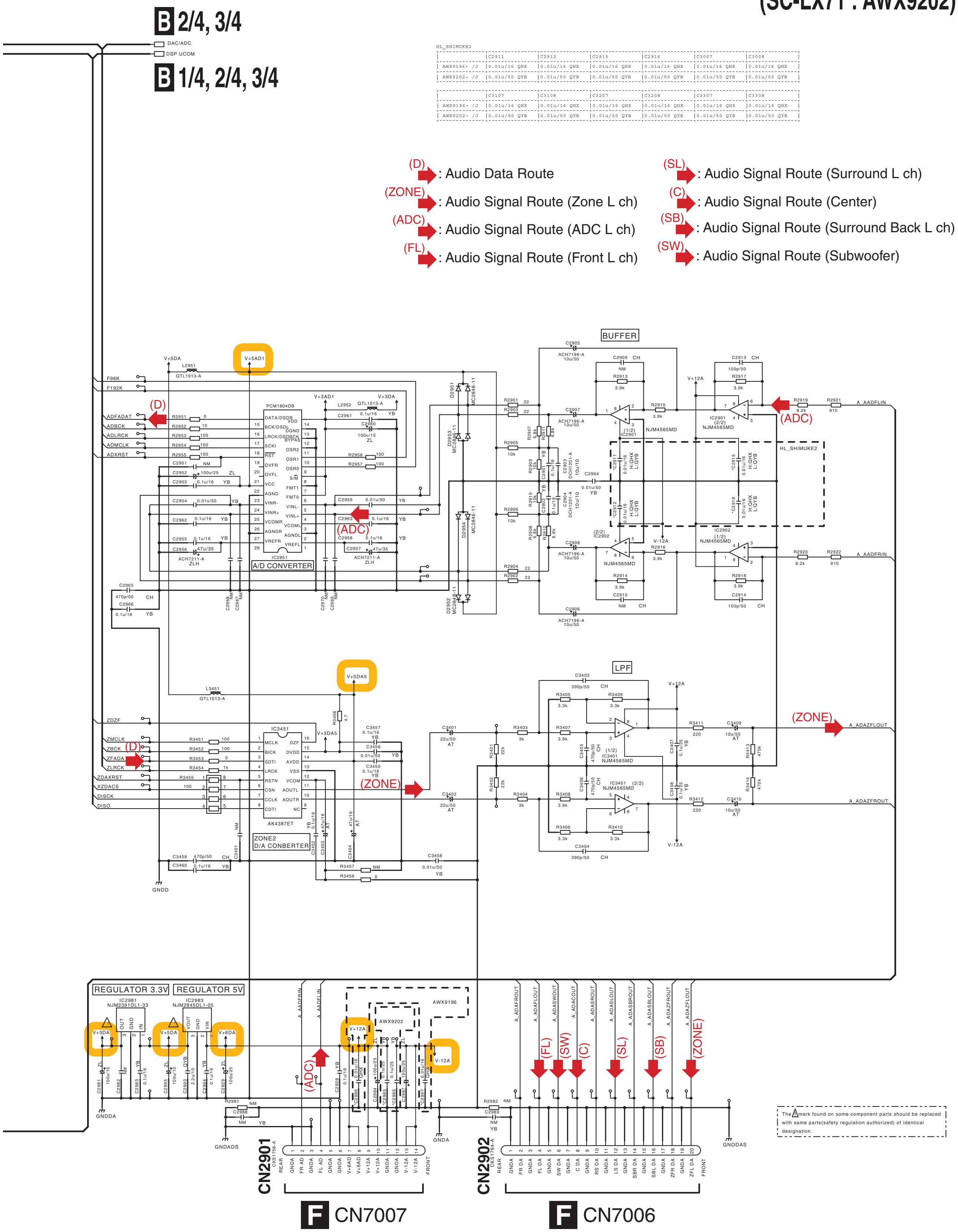
B 4/4 D-MOTHER ASSY
(SC-LX81 : AWX9196)
(SC-LX71 : AWX9202)

HL_SHIMUKE2

	C2911	C2912	C2915	C2916	C3007	C3008
AWX9196- /J	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX
AWX9202- /J	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB

	C3107	C3108	C3207	C3208	C3307	C3308
AWX9196- /J	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX	0.01u/16 QHX
AWX9202- /J	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB	0.01u/50 QYB

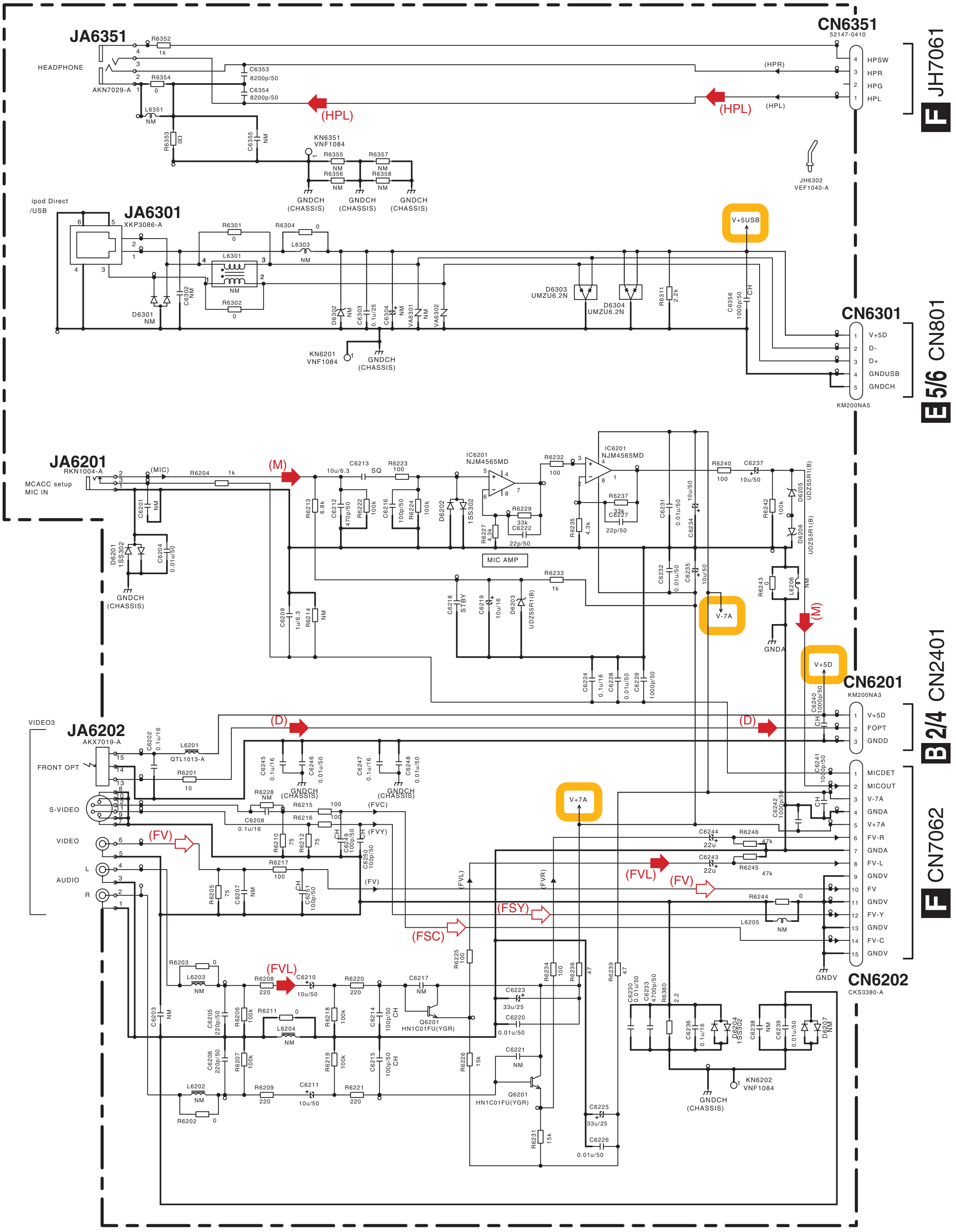
(D) ➡ : Audio Data Route
(ZONE) ➡ : Audio Signal Route (Zone L ch)
(ADC) ➡ : Audio Signal Route (ADC L ch)
(FL) ➡ : Audio Signal Route (Front L ch)
(SL) ➡ : Audio Signal Route (Surround L ch)
(C) ➡ : Audio Signal Route (Center)
(SB) ➡ : Audio Signal Route (Surround Back L ch)
(SW) ➡ : Audio Signal Route (Subwoofer)


B 2/4, 3/4
DAC/ADC
DSP UCOM
B 1/4, 2/4, 3/4
BUFFER
LPF
A/D CONVERTER
IC2951 PCM1804DB
ZONE2 D/A CONBERTER
IC3451 AK4387ET
IC2901 NJM4565MD
IC2902 NJM4565MD
IC3401 NJM4565MD
HL_SHIMUKE2
A_AADFLIN
A_AADFRIN
A_ADAZFLOUT
A_ADAZFROUT
V+5DA
V+5AD1
V+3AD1
V+3DA
V+5DA5
V+3DA5
V+12A
V-12A
ADFADAT
ADBCK
ADLRCK
ADMCLK
ADXRST
F96K
F192K
ZDZF
ZMCLK
ZBCK
ZFADA
ZLRCK
ZDAXRST
XZDACS
DISCK
DISO
GNDD
REGULATOR 3.3V
REGULATOR 5V
IC2981 NJM2391DL1-33
IC2983 NJM2845DL1-05
V+3DA
V+5DA
V+6DA
AWX9196
AWX9202
GNDDA
GNDADS
GNDA
GNDDAS
CN2901 CKS1758-A
REAR
1 GNDA
2 FR AD
3 GNDA
4 FL AD
5 GNDA
6 GNDA
7 V+6AD
8 V+6AD
9 V+12A
10 V+12A
11 GNDA
12 GNDA
13 V-12A
14 V-12A
FRONT
CN2902 CKS1764-A
REAR
1 GNDA
2 FR DA
3 GNDA
4 FL DA
5 GNDA
6 SW DA
7 GNDA
8 C DA
9 GNDA
10 RS DA
11 GNDA
12 LS DA
13 GNDA
14 SBR DA
15 GNDA
16 SBL DA
17 GNDA
18 ZFR DA
19 GNDA
20 ZFL DA
FRONT
F CN7007
F CN7006
(D)
(ADC)
(ZONE)
(FL)
(SW)
(C)
(SL)
(SB)

The △ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

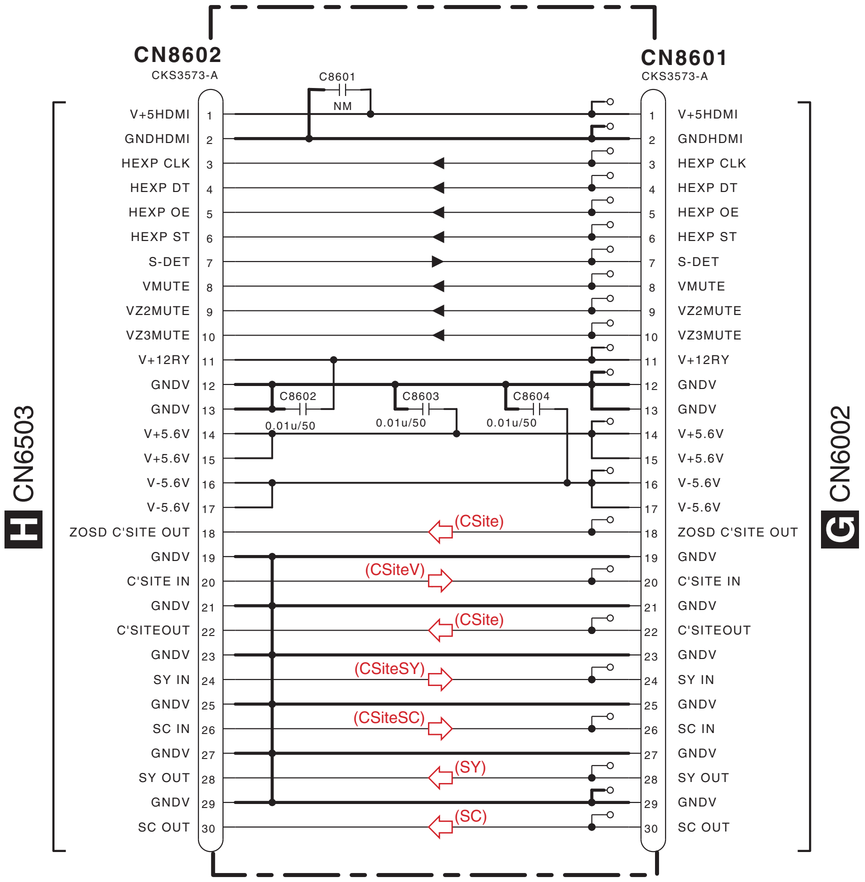
10.6 FRONT IN and V-BRIDGE ASSYS

C FRONT IN ASSY (AWX9142)


JA6351
HEADPHONE
AKN7029-A
R6352 1k
R6354 0
C6353 8200p/50
C6354 8200p/50
L6351 NM
R6353 0Ω
C6355 NM
(HPL)
(HPR)
KN6351 VNF1084
R6355 NM
R6356 NM
R6357 NM
R6358 NM
GNDCH (CHASSIS)
CN6351
52147-0410
HPSW
HPR
HPG
HPL
F JH7061
JH6302 VEF1040-A
V+5USB
ipod Direct /USB
JA6301
XKP3086-A
R6301 0
R6304 0
L6303 NM
L6301
C6302 NM
D6301 NM
R6302 0
D6302 NM
C6303 0.1u/25
C6304 NM
VA6301 NM
VA6302
D6303 UMZU6.2N
D6304 UMZU6.2N
R6311 2.2k
C6356 1000p/50 CH
KN6201 VNF1084
CN6301
V+5D
D-
D+
GNDUSB
GNDCH
KM200NA5
E 5/6 CN801
JA6201
RKN1004-A
MCACC setup MIC IN
(MIC)
R6204 1k
(M)
C6201 NM
D6201 1SS302
C6204 0.01u/50
C6213 10u/6.3 SQ
R6223 100
R6213 6.8k
C6212 470p/50
R6222 100k
C6216 100p/50
R6224 100k
D6202
1SS302
IC6201 NJM4565MD
R6227 4.3k
R6229 33k
C6222 22p/50
MIC AMP
R6232 100
R6235 4.3k
R6237 33k
C6227 22p/50
R6233 1k
C6218 STBY
C6219 10u/16
D6203 UDZS5R1(B)
C6209 1u/6.3
R6214 NM
C6231 0.01u/50
C6234 10u/50
C6232 0.01u/50
C6235 10u/50
R6240 100
C6237 10u/50
R6242 100k
D6205 UDZS5R1(B)
D6206 UDZS5R1(B)
R6243 0
L6206 NM
V-7A
GNDA
C6224 0.1u/16
C6228 0.01u/50
C6229 1000p/50
V+5D
CN6201
KM200NA3
C6240 1000p/50 CH
V+5D
FOPT
GNDD
B 2/4 CN2401
VIDEO3
JA6202
AKX7019-A
FRONT OPT
S-VIDEO
VIDEO
AUDIO L R
(D)
C6202 0.1u/16
L6201 QTL1013-A
R6201 10
C6245 0.1u/16
C6246 0.01u/50
C6247 0.1u/16
C6248 0.01u/50
R6228 NM
C6208 0.1u/16
R6215 100
R6216 100
(FVC)
(FVY)
(FV)
R6210 75
R6212 75
C6249 100p/50 CH
C6250 100p/50 CH
R6217 100
R6205 75
C6207 NM
C6251 100p/50 CH
(FVL)
(FVR)
(FSY)
(FSC)
V+7A
C6241 1000p/50 CH
C6242 1000p/50 CH
C6244 22u
R6246 47k
C6243 22u
R6245 47k
R6244 0
L6205 NM
CN6202
CKS3380-A
MICDET
MICOUT
V-7A
GNDA
V+7A
FV-R
GNDA
FV-L
GNDV
FV
GNDV
FV-Y
GNDV
FV-C
GNDV
F CN7062
R6203 0
L6203 NM
C6203 NM
R6208 220
C6210 10u/50
R6220 220
C6217 NM
Q6201 HN1C01FU(YGR)
C6205 220p/50
R6206 100k
R6211 0
L6204 NM
R6218 100k
C6214 100p/50 CH
C6206 220p/50
R6207 100k
R6219 100k
C6215 100p/50 CH
L6202 NM
R6202 0
R6209 220
C6211 10u/50
R6221 220
R6225 100
R6226 15k
R6234 100
R6236 47
C6223 33u/25
C6220 0.01u/50
C6221 NM
Q6201 HN1C01FU(YGR)
R6231 15k
C6225 33u/25
C6226 0.01u/50
R6239 47
C6230 0.01u/50
C6233 470p/50
R6360 2.2
C6236 0.1u/16
D6204 1SS302
C6238 NM
C6239 0.01u/50
D6207 NM
KN6202 VNF1084
GNDCH (CHASSIS)
GNDV

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH
NO MARKED : CKSRYB
3. NM: No Mount

J V-BRIDGE ASSY (AWX9161)

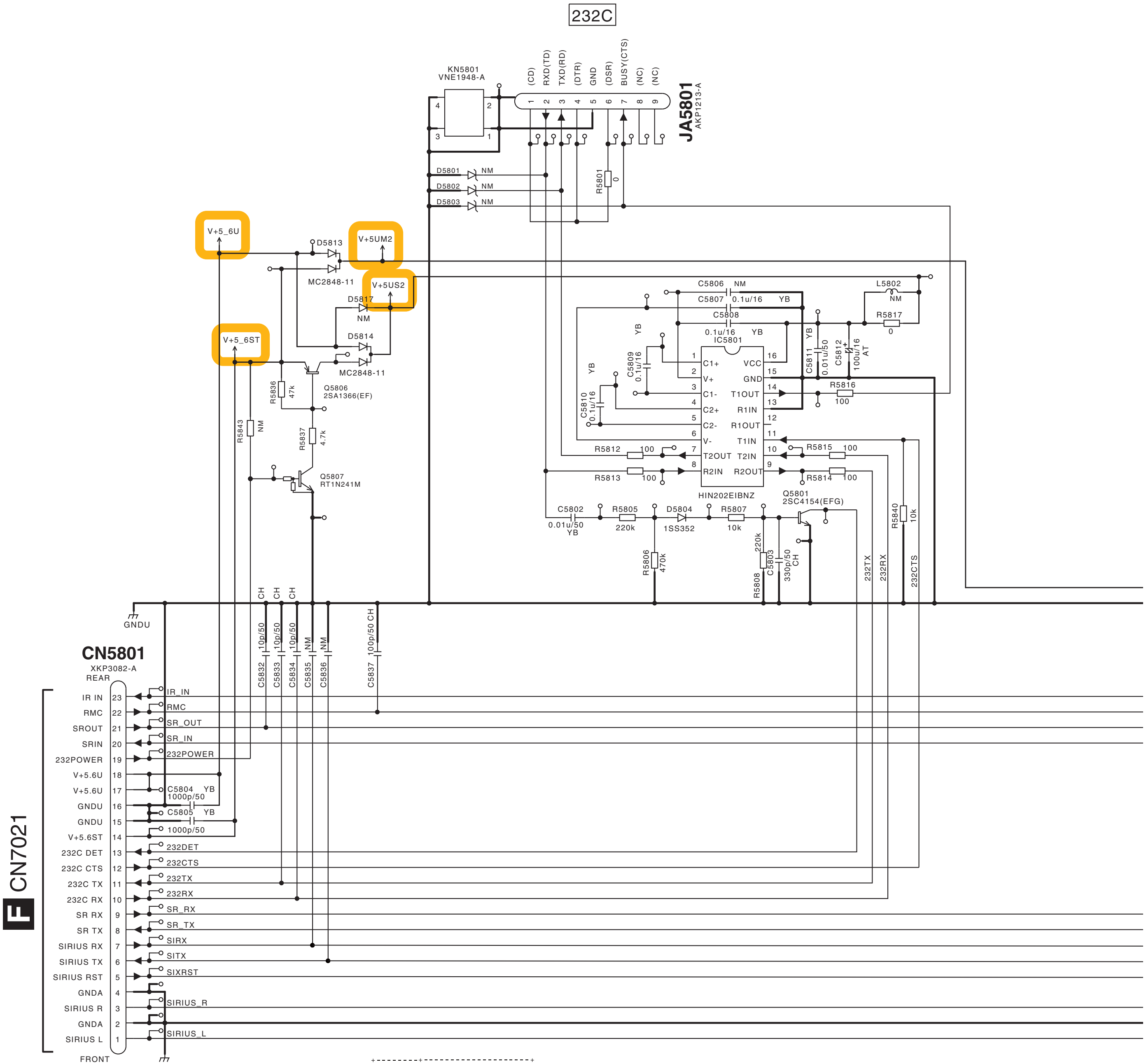

CN8602
CKS3573-A
CN8601
CKS3573-A
C8601
NM
C8602
0.01u/50
C8603
0.01u/50
C8604
0.01u/50
H CN6503
G CN6002
1 V+5HDMI
2 GNDHDMI
3 HEXP CLK
4 HEXP DT
5 HEXP OE
6 HEXP ST
7 S-DET
8 VMUTE
9 VZ2MUTE
10 VZ3MUTE
11 V+12RY
12 GNDV
13 GNDV
14 V+5.6V
15 V+5.6V
16 V-5.6V
17 V-5.6V
18 ZOSD C'SITE OUT
19 GNDV
20 C'SITE IN
21 GNDV
22 C'SITEOUT
23 GNDV
24 SY IN
25 GNDV
26 SC IN
27 GNDV
28 SY OUT
29 GNDV
30 SC OUT
(CSite)
(CSiteV)
(CSite)
(CSiteSY)
(CSiteSC)
(SY)
(SC)

NOTE

1. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
2. NM: No Mount

(FSC) ⇨ : S-Video Signal Route (Front C)
(FSY) ⇨ : S-Video Signal Route (Front Y)
(FV) ⇨ : Video Signal Route (Video)
(D) ➡ : Audio Data Route
(FVL) ➡ : Audio Signal Route (Video L ch)
(M) ➡ : Audio Signal Route (Mic)
(HPL) ➡ : Audio Signal Route (Headphone L ch)
(SC) ⇨ : S-Video Signal Route (C)
(SY) ⇨ : S-Video Signal Route (Y)
(CSiteSC) ⇨ : Video Signal Route (Composite C)
(CSiteSY) ⇨ : Video Signal Route (Composite Y)
(CSiteV) ⇨ : Video Signal Route (Composite Video)
(CSite) ⇨ : Video Signal Route (Composite)

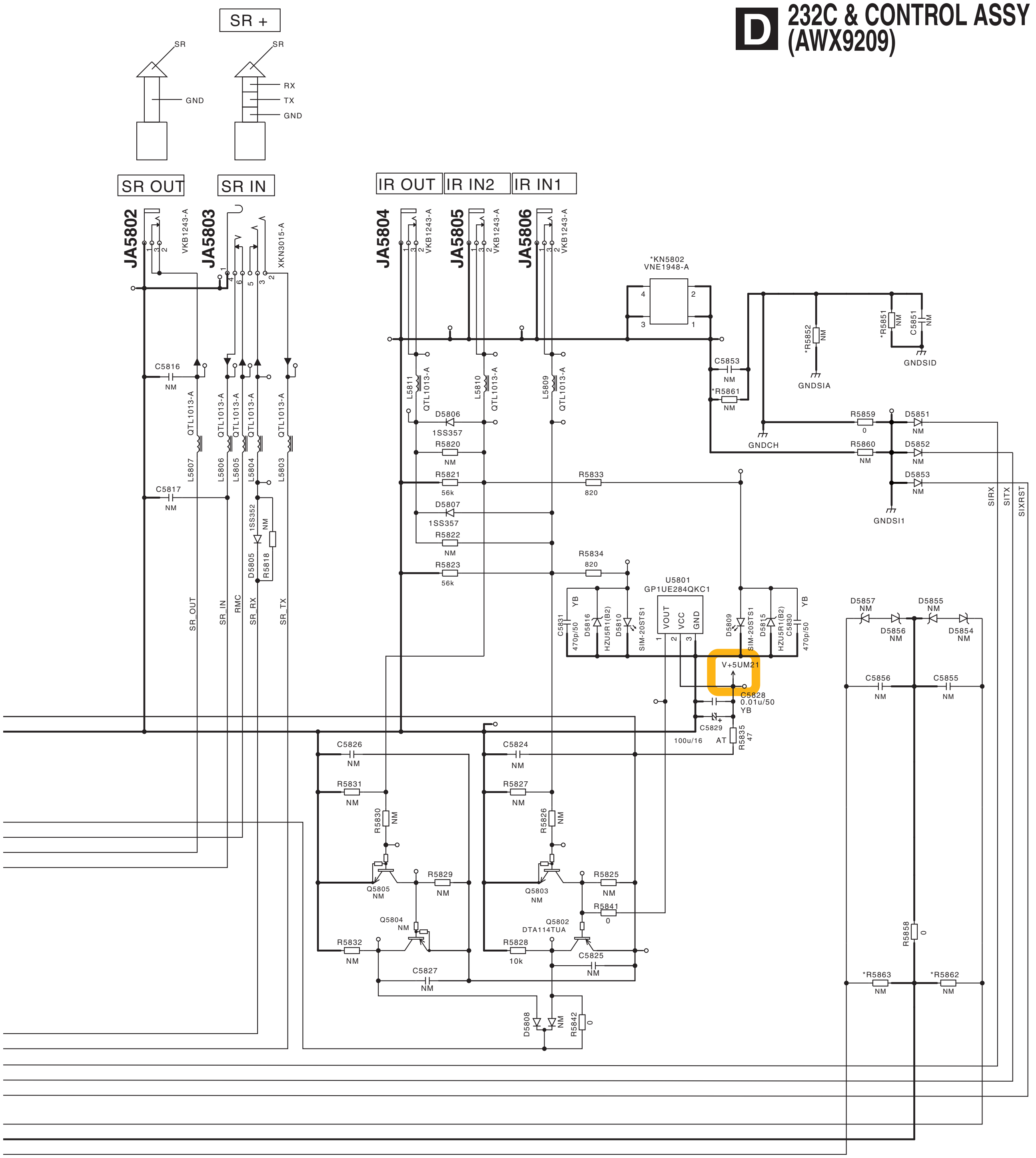
10.7 232C & CONTROL ASSY



232C
KN5801
VNE1948-A
(CD)
RXD(TD)
TXD(RD)
(DTR)
GND
(DSR)
BUSY(CTS)
(NC)
(NC)
JA5801
AKP1213-A
D5801 NM
D5802 NM
D5803 NM
R5801 0
V+5_6U
D5813
V+5UM2
MC2848-11
V+5US2
D5817
NM
D5814
V+5_6ST
MC2848-11
R5836 47k
Q5806
2SA1366(EF)
R5843 NM
R5837 4.7k
Q5807
RT1N241M
C5806 NM
C5807 0.1u/16 YB
C5808
0.1u/16 YB
IC5801
L5802 NM
R5817 0
C5811 YB 0.01u/50
C5812 100u/16 AT
C5809 0.1u/16 YB
C5810 0.1u/16 YB
C1+
V+
C1-
C2+
C2-
V-
T2OUT
R2IN
VCC
GND
T1OUT
R1IN
R1OUT
T1IN
T2IN
R2OUT
R5816 100
R5812 100
R5813 100
R5815 100
R5814 100
HIN202EIBNZ
Q5801
2SC4154(EFG)
C5802 0.01u/50 YB
R5805 220k
D5804 1SS352
R5807 10k
R5806 470k
R5808 220k
C5803 330p/50 CH
R5840 10k
232TX
232RX
232CTS
GNDU
CH
C5832 10p/50
C5833 10p/50
C5834 10p/50
C5835 NM
C5836 NM
C5837 100p/50 CH
CN5801
XKP3082-A
REAR
IR IN 23
RMC 22
SROUT 21
SRIN 20
232POWER 19
V+5.6U 18
V+5.6U 17
GNDU 16
GNDU 15
V+5.6ST 14
232C DET 13
232C CTS 12
232C TX 11
232C RX 10
SR RX 9
SR TX 8
SIRIUS RX 7
SIRIUS TX 6
SIRIUS RST 5
GNDA 4
SIRIUS R 3
GNDA 2
SIRIUS L 1
FRONT
GNDA
IR_IN
RMC
SR_OUT
SR_IN
232POWER
C5804 YB
1000p/50
C5805 YB
1000p/50
232DET
232CTS
232TX
232RX
SR_RX
SR_TX
SIRX
SITX
SIXRST
SIRIUS_R
SIRIUS_L
F CN7021

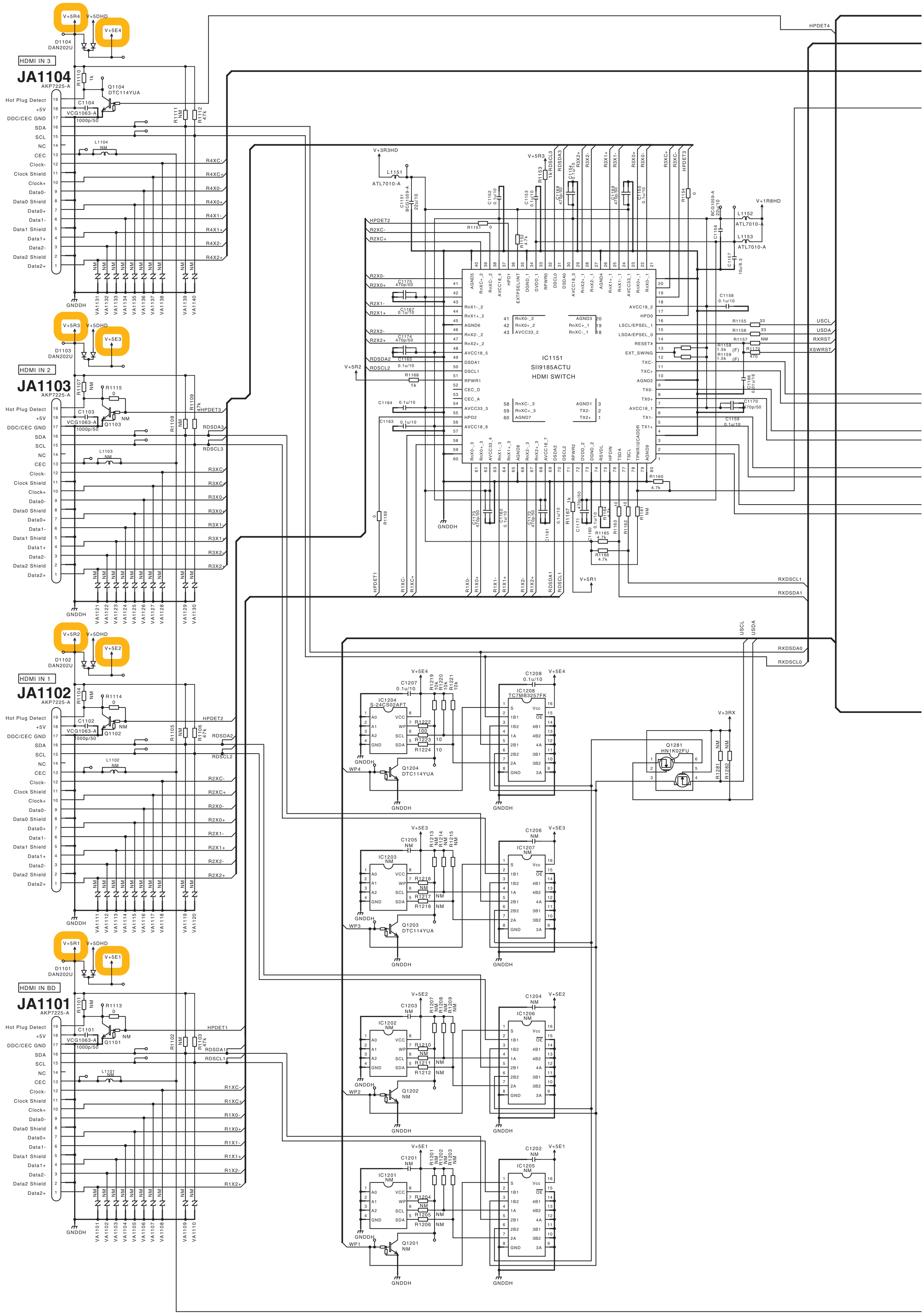
	SC-LX81 SC-LX71	/HYS
	AWX9209- /J	
C5852	NM	
C5857	NM	
C5858	NM	
R5851	0	
R5852	0	
R5853	NM	
R5854	NM	
R5855	NM	
R5856	NM	
R5857	NM	
R5861	0	
R5862	0	
R5863	0	
D5858	NM	
JA5807	NM	
KN5802	VNE1948-A	

D 232C & CONTROL ASSY (AWX9209)


SR +
SR
GND
RX
TX
SR OUT
SR IN
IR OUT
IR IN2
IR IN1
JA5802
VKB1243-A
JA5803
XKN3015-A
JA5804
JA5805
JA5806
*KN5802
VNE1948-A
C5816
C5817
NM
QTL1013-A
L5807
L5806
L5805
L5804
L5803
1SS352
D5805
R5818
SR_OUT
SR_IN
RMC
SR_RX
SR_TX
L5811
L5810
L5809
D5806
1SS357
R5820
R5821
56k
D5807
R5822
R5823
R5833
820
R5834
C5853
*R5861
*R5852
*R5851
C5851
GNDSIA
GNDSID
GNDCH
R5859
0
R5860
D5851
D5852
D5853
GNDSI1
SIRX
SITX
SIXRST
U5801
GP1UE284QKC1
VOUT
VCC
GND
C5831
470p/50
YB
D5816
HZU5R1(B2)
D5810
SIM-20STS1
D5809
D5815
C5830
V+5UM21
C5828
0.01u/50
C5829
100u/16
AT
R5835
47
D5857
D5856
D5855
D5854
C5856
C5855
C5826
C5824
R5831
R5830
R5827
R5826
Q5805
R5829
Q5803
R5825
R5841
Q5804
Q5802
DTA114TUA
R5832
R5828
10k
C5825
C5827
D5808
R5842
R5858
*R5863
*R5862

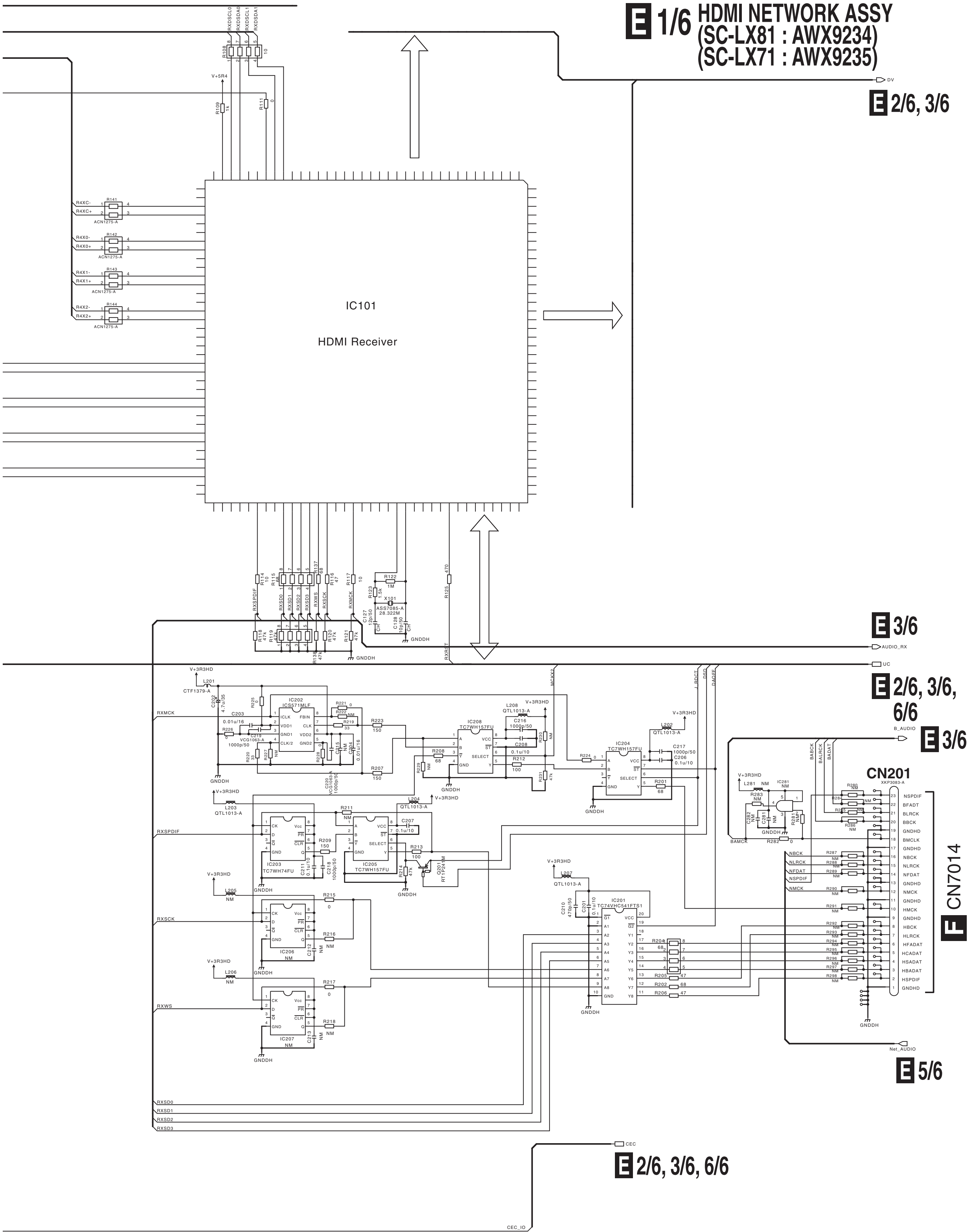
NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, CH:CCSRCH, AT:CEAT
3. NM: No Mount

10.8 HDMI NETWORK ASSY (1/6)



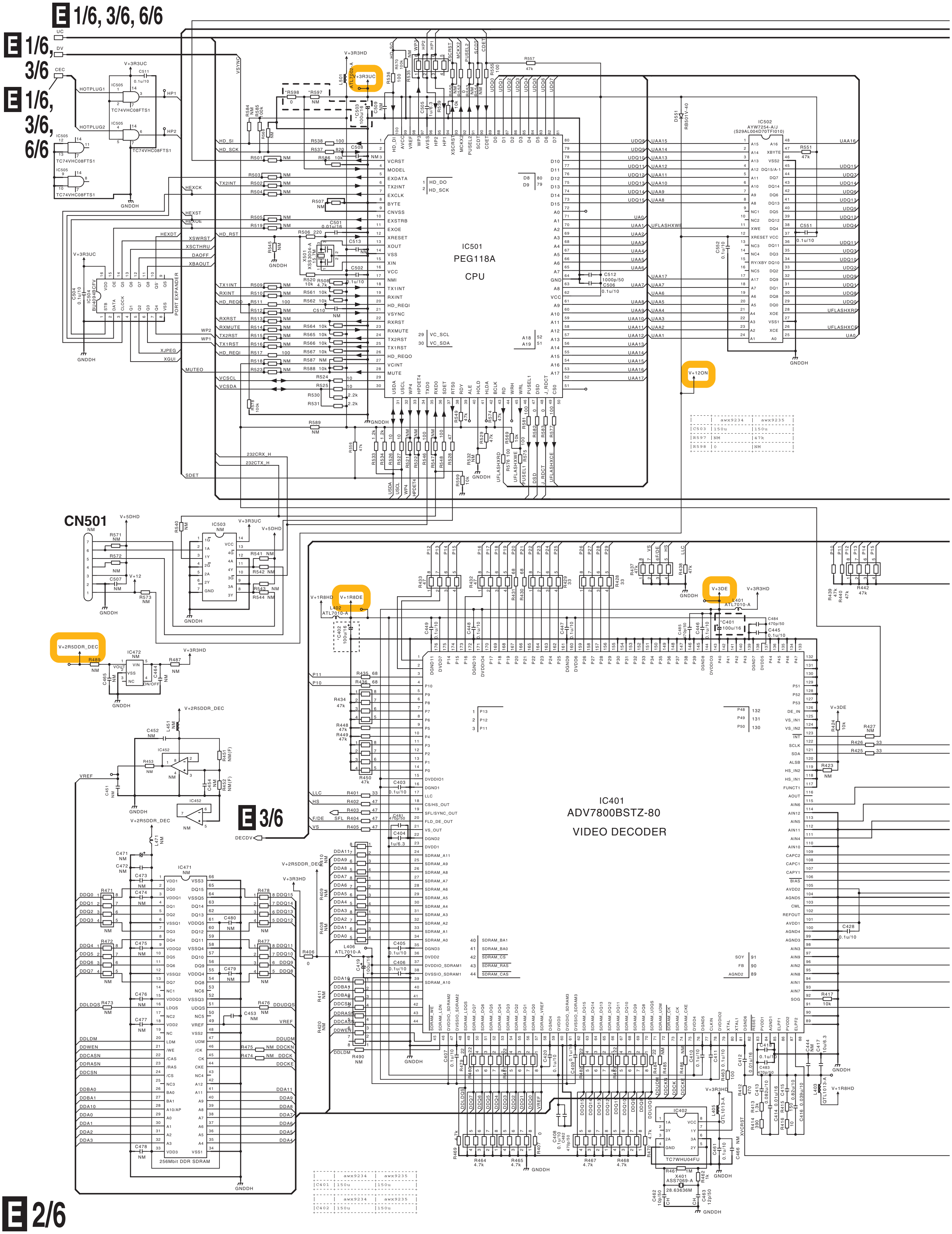
1
2
3
4
A
B
C
D
E
F
V+5R4
V+5DHD
V+5E4
D1104
DAN202U
HDMI IN 3
JA1104
AKP7225-A
R1110
1k
Q1104
DTC114YUA
C1104
VCG1063-A
1000p/50
L1104
NM
Hot Plug Detect
+5V
DDC/CEC GND
SDA
SCL
NC
CEC
Clock-
Clock Shield
Clock+
Data0-
Data0 Shield
Data0+
Data1-
Data1 Shield
Data1+
Data2-
Data2 Shield
Data2+
R1111
NM
R1112
47k
R4XC-
R4XC+
R4X0-
R4X0+
R4X1-
R4X1+
R4X2-
R4X2+
GNDDH
VA1131
VA1132
VA1133
VA1134
VA1135
VA1136
VA1137
VA1138
VA1139
VA1140
V+5R3
V+5E3
D1103
HDMI IN 2
JA1103
R1107
R1115
Q1103
C1103
R1108
R1109
HPDET3
RDSDA3
RDSCL3
L1103
R3XC-
R3XC+
R3X0-
R3X0+
R3X1-
R3X1+
R3X2-
R3X2+
VA1121
VA1122
VA1123
VA1124
VA1125
VA1126
VA1127
VA1128
VA1129
VA1130
V+5R2
V+5E2
D1102
HDMI IN 1
JA1102
R1104
R1114
Q1102
C1102
R1105
R1106
HPDET2
RDSDA2
RDSCL2
L1102
R2XC-
R2XC+
R2X0-
R2X0+
R2X1-
R2X1+
R2X2-
R2X2+
VA1111
VA1112
VA1113
VA1114
VA1115
VA1116
VA1117
VA1118
VA1119
VA1120
V+5R1
V+5E1
D1101
HDMI IN BD
JA1101
R1101
R1113
Q1101
C1101
R1102
R1103
HPDET1
RDSDA1
RDSCL1
L1101
R1XC-
R1XC+
R1X0-
R1X0+
R1X1-
R1X1+
R1X2-
R1X2+
VA1101
VA1102
VA1103
VA1104
VA1105
VA1106
VA1107
VA1108
VA1109
VA1110
V+3R3HD
L1151
ATL7010-A
C1151
BCG1059-A
22/10
V+5R3
R1153
1k
C1152
0.1u/10
C1153
0.1u/10
C1154
0.1u/10
C1168
470p/50
C1169
470p/50
C1155
0.1u/10
R1154
0
HPDET3
V+1R8HD
L1152
ATL7010-A
L1153
ATL7010-A
C1156
BCG1059-A
22/10
C1157
10u/6.3
R1151
0
R1152
4.7k
IC1151
SII9185ACTU
HDMI SWITCH
C1175
470p/50
C1167
0.1u/10
C1174
470p/50
C1165
0.1u/10
R1168
1k
V+5R2
C1164
C1163
C1158
0.1u/10
R1155
33
R1156
33
R1157
NM
R1158
1.5k
R1159
1.5k
R1170
470
C1166
0.01u/16
C1170
470p/50
C1159
0.1u/10
R1160
4.7k
USCL
USDA
RXRST
XSWRST
HPDET4
R1169
GNDDH
C1173
470p/50
C1162
0.1u/10
C1172
470p/50
C1161
0.1u/10
R1167
1k
C1171
470p/50
C1160
R1164
R1163
R1162
R1161
NM
R1165
4.7k
R1166
4.7k
V+5R1
RXDSCL1
RXDSDA1
RXDSDA0
RXDSCL0
AGND5
AVCC18_4
HPD1
EXTSPSEL/INT
DGND_1
DVDD_1
DSCL0
DSDA0
AVCC18_3
AGND4
AVCC33_1
AGND6
AVCC18_5
DSDA1
DSCL1
RPWR1
CEC_D
CEC_A
AVCC33_3
HPD2
AVCC18_6
AVCC18_2
HPD0
LSCL/EPSEL_1
LSDA/EPSEL_0
RESET#
EXT_SWING
TXC-
TXC+
AGND2
TX0-
TX0+
AVCC18_1
TX1-
TX1+
AVCC33_4
AGND8
AVCC18_7
DSDA2
DSCL2
RPWR2
DVDD_2
DGND_2
RSVDL
HPDIN
TSDA
TSCL
TPWR/I2CADDR
AGND9
AGND3
AGND1
AGND7
AVCC33_2
V+5E4
C1207
0.1u/10
R1219
10k
R1220
10k
R1221
10k
IC1204
S-24CS02AFT
A0
A1
A2
GND
VCC
WP
SCL
SDA
R1222
100
R1223
10
R1224
10
GNDDH
WP4
Q1204
DTC114YUA
GNDDH
C1208
0.1u/10
IC1208
TC7MB3257FK
S
Vcc
OE
1B1
1B2
1A
2B1
2B2
2A
GND
4B1
4B2
4A
3B1
3B2
3A
C1205
NM
R1213
R1214
R1215
NM
IC1203
R1216
R1217
R1218
WP3
Q1203
C1206
IC1207
C1203
R1207
R1208
R1209
IC1202
R1210
R1211
R1212
WP2
Q1202
C1204
IC1206
C1201
R1201
R1202
R1203
IC1201
R1204
R1205
R1206
WP1
Q1201
C1202
IC1205
V+3RX
Q1281
HN1K02FU
R1281
R1282

E 1/6 HDMI NETWORK ASSY
(SC-LX81 : AWX9234)
(SC-LX71 : AWX9235)


IC101
HDMI Receiver
RXDSCL0
RXDSDA0
RXDSCL1
RXDSDA1
R108 10
V+5R4
R109 1k
R111 0
R4XC-
R4XC+
R141
ACN1275-A
R4X0-
R4X0+
R142
R4X1-
R4X1+
R143
R4X2-
R4X2+
R144
DV
E 2/6, 3/6
RXSPDIF
RXSD0
RXSD1
RXSD2
RXSD3
RXWS
RXSCK
RXMCK
R114
R115
R137 68
R116 47
R117 10
R122 1M
R123 1.5k
X101
ASS7085-A
28.322M
C127 12p/50
C128 10p/50
R125 470
R118 47k
R119 47k
R120 47k
R121 47k
R136 47k
GNDDH
E 3/6
AUDIO_RX
RXRST
UC
E 2/6, 3/6, 6/6
MCKX2
L.RDCT
RSD
DADFF
V+3R3HD
L201
CTF1379-A
C202 4.7u/35
C203 0.01u/16
R226
C219
VCG1063-A
1000p/50
R225 0
R220
R227
IC202
ICS571MLF
ICLK FBIN
VDD1 CLK
GND1 VDD2
CLK/2 GND2
R221 0
R222 NM
R219 33
R228
C215 NM
C204 0.01u/16
C220 VCG1063-A 1000p/50
R223 150
R207 150
IC208
TC7WH157FU
L208
QTL1013-A
C216 1000p/50
C208 0.1u/10
R212 100
R208 68
R229 NM
R230 NM
R231 47k
SELECT
IC204
TC7WH157FU
R224 0
C217 1000p/50
C206 0.1u/10
L202
QTL1013-A
R201 68
B_AUDIO
E 3/6
L203
QTL1013-A
IC203
TC7WH74FU
CK Vcc D PR Q CLR GND Q
R209 150
C211 0.1u/10
C218 1000p/50
R211 NM
IC205
TC7WH157FU
L204
QTL1013-A
C207 0.1u/10
R213 100
R214 47k
Q201
RT1P241M
L205 NM
R215 0
R216 NM
C212 NM
IC206 NM
L206 NM
R217 0
R218 NM
C213 NM
IC207 NM
L207
QTL1013-A
C210 470p/50
C201 0.1u/10
IC201
TC74VHC541FTS1
G1 VCC G2
A1 Y1 A2 Y2 A3 Y3 A4 Y4 A5 Y5 A6 Y6 A7 Y7 A8 Y8
R204 68
R205 47
R202 68
R206 47
BALRCK
BALRCK
BADAT
BAMCK
L281 NM
R283 NM
IC281 NM
C282 NM
C281 NM
R281 NM
R282 0
CN201
XKP3083-A
R280 NM
R284 NM
R285 NM
R286 NM
R287 NM
R288 NM
R289 NM
R290 NM
R291 NM
R292 NM
R293 NM
R294 NM
R295 NM
R296 NM
R297 NM
R298 NM
NBCK
NLRCK
NFDAT
NSPDIF
NMCK
23 NSPDIF
22 BFADT
21 BLRCK
20 BBCK
19 GNDHD
18 BMCLK
17 GNDHD
16 NBCK
15 NLRCK
14 NFDAT
13 GNDHD
12 NMCK
11 GNDHD
10 HMCK
9 GNDHD
8 HBCK
7 HLRCK
6 HFADAT
5 HCADAT
4 HSADAT
3 HBADAT
2 HSPDIF
1 GNDHD
F CN7014
Net_AUDIO
E 5/6
CEC
E 2/6, 3/6, 6/6
CEC_IO

E 1/6

10.9 HDMI NETWORK ASSY (2/6)



E 1/6, 3/6, 6/6
E 1/6, 3/6
E 1/6, 3/6, 6/6
UC
DV
CEC
HOTPLUG1
HOTPLUG2
HP1
HP2
IC505 TC74VHC08FTS1
V+3R3UC
C511 0.1u/10
GNDDH
HEXCK
HEXST
HEXOE
HEXDT
XSWRST
XSCTHRU
DAOFF
XBAOUT
IC504 BU4094BCFV
PORT EXPANDER
WP2
WP1
XJPEG
XGUI
MUTEO
SDET
VSYNC
HD_SI
HD_SCK
TX2INT
HD_RST
TX1INT
RXINT
HD_REQO
RXRST
RXMUTE
TX2RST
TX1RST
HD_REQI
VCSCL
VCSDA
232CRX_H
232CTX_H
X501 XSS3004-A 16.7M
IC501
PEG118A
CPU
V+3R3HD
L501 ATL7010-A
V+3R3UC
*C503 100u/16
*R598 0
*R597 NM
R557 47k
IC502
AYW7254-A/J
(S29AL004D70TFI010)
D551 RB501V-40
UFLASHWE
UFLASHXCE
UFLASHXRD
V+12ON
CN501
V+5DHD
IC503 NM
V+12
C507 NM
R573 NM
V+2R5DDR_DEC
IC472 NM
VOUT VIN VSS NC ON/OFF
V+3R3HD
IC452
VREF
DECDV
E 3/6
V+1R8HD
V+1R8DE
L402 ATL7010-A
*C402 100u/16
V+3DE
L401 ATL7010-A
*C401 100u/16
IC401
ADV7800BSTZ-80
VIDEO DECODER
IC471 NM
256Mbit DDR SDRAM
IC402
TC7WHU04FU
X401 ASS7069-A 28.63636M
L403 QTL1013-A
L405 QTL1013-A
GNDDH
E 2/6

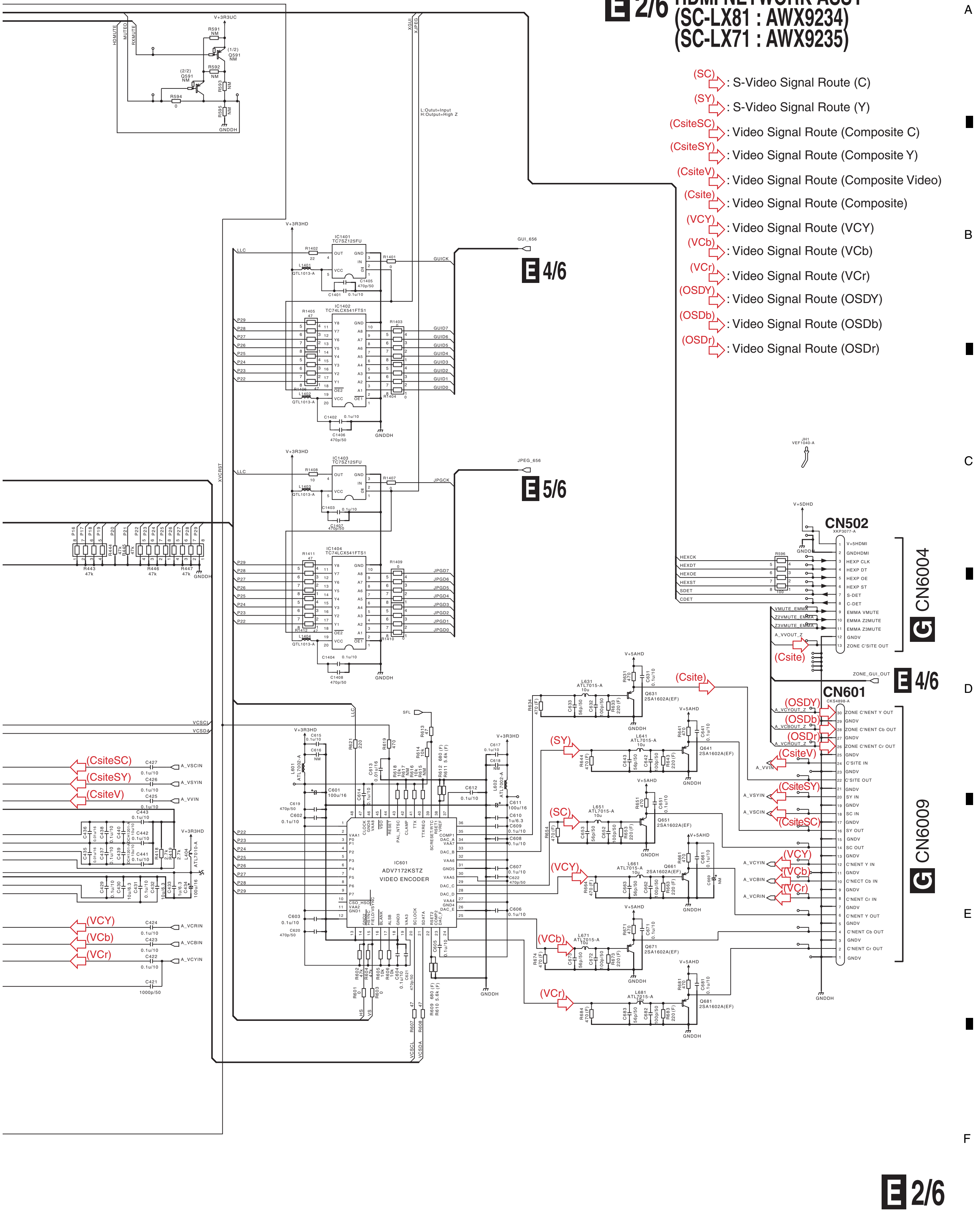
	awx9234	awx9235
C503	150u	150u
R597	NM	47k
R598	0	NM

	awx9234	awx9235
C401	150u	150u

	awx9234	awx9235
C402	150u	150u

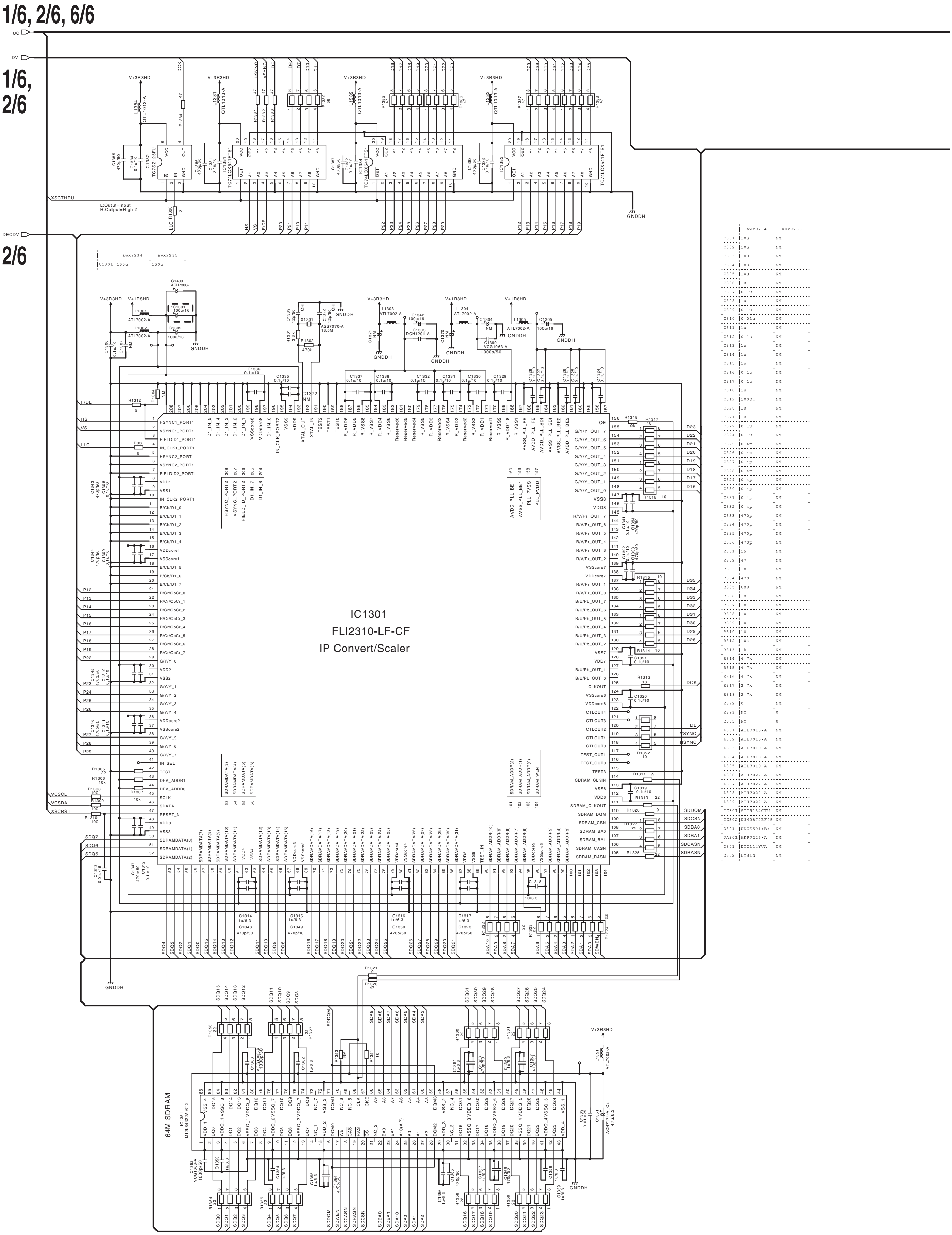
E 2/6 HDMI NETWORK ASSY (SC-LX81 : AWX9234) (SC-LX71 : AWX9235)

(SC) : S-Video Signal Route (C)
(SY) : S-Video Signal Route (Y)
(CsiteSC) : Video Signal Route (Composite C)
(CsiteSY) : Video Signal Route (Composite Y)
(CsiteV) : Video Signal Route (Composite Video)
(Csite) : Video Signal Route (Composite)
(VCY) : Video Signal Route (VCY)
(VCb) : Video Signal Route (VCb)
(VCr) : Video Signal Route (VCr)
(OSDY) : Video Signal Route (OSDY)
(OSDb) : Video Signal Route (OSDb)
(OSDr) : Video Signal Route (OSDr)



V+3R3UC
HDMUTE
MUTEO
RXMUTE
R591 NM
(1/2) Q591 NM
R592 NM
(2/2) Q591 NM
R593 NM
R594 0
R595 NM
GNDDH
XGUI
XJPEG
L:Outut=Input
H:Output=High Z
V+3R3HD
IC1401 TC7SZ125FU
LLC
R1402 22
L1401 QTL1013-A
C1401 0.1u/10
C1405 470p/50
R1401 0
GUICK
GUI_656
E 4/6
IC1402 TC74LCX541FTS1
R1405 47
R1403 0
P29 P28 P27 P26 P25 P24 P23 P22
GUID7 GUID6 GUID5 GUID4 GUID3 GUID2 GUID1 GUID0
R1406 47
L1402 QTL1013-A
R1404 0
C1402 0.1u/10
C1406 470p/50
GNDDH
XVCRST
IC1403 TC7SZ125FU
R1408 10
L1403 QTL1013-A
C1403 0.1u/10
C1407 470p/50
R1407 0
JPGCK
JPEG_656
E 5/6
IC1404 TC74LCX541FTS1
R1411 47
R1409 0
JPGD7 JPGD6 JPGD5 JPGD4 JPGD3 JPGD2 JPGD1 JPGD0
R1412 47
L1404 QTL1013-A
R1410 0
C1404 0.1u/10
C1408 470p/50
P16 P17 P18 P19 P20 P21 P22 P23 P24 P25 P26 P27 P28 P29
R443 47k
R444 47k
R445 47k
R446 47k
R447 47k
GNDDH
JH1 VEF1040-A
V+5DHD
CN502 XKP3077-A
R596 100
HEXCK HEXDT HEXOE HEXST SDET CDET
VMUTE_EMMA Z2VMUTE_EMMA Z3VMUTE_EMMA A_VVOUT_Z
1 V+5HDMI
2 GNDHDMI
3 HEXP CLK
4 HEXP DT
5 HEXP OE
6 HEXP ST
7 S-DET
8 C-DET
9 EMMA VMUTE
10 EMMA Z2MUTE
11 EMMA Z3MUTE
12 GNDV
13 ZONE C'SITE OUT
G CN6004
(Csite)
ZONE_GUI_OUT
E 4/6
CN601 CKS4898-A
A_VCYOUT_Z A_VCBOUT_Z A_VCROUT_Z
(OSDY) (OSDb) (OSDr)
30 ZONE C'NENT Y OUT
29 GNDV
28 ZONE C'NENT Cb OUT
27 GNDV
26 ZONE C'NENT Cr OUT
25 GNDV
24 C'SITE IN
23 GNDV
22 C'SITE OUT
21 GNDV
20 SY IN
19 GNDV
18 SC IN
17 GNDV
16 SY OUT
15 GNDV
14 SC OUT
13 GNDV
12 C'NENT Y IN
11 GNDV
10 C'NECT Cb IN
9 GNDV
8 C'NENT Cr IN
7 GNDV
6 C'NENT Y OUT
5 GNDV
4 C'NENT Cb OUT
3 GNDV
2 C'NENT Cr OUT
1 GNDV
G CN6009
A_VVIN A_VSYIN A_VSCIN A_VCYIN A_VCBIN A_VCRIN
(CsiteV) (CsiteSY) (CsiteSC) (VCY) (VCb) (VCr)
VCSCL VCSDA
(CsiteSC) (CsiteSY) (CsiteV)
C427 0.1u/10 A_VSCIN
C426 0.1u/10 A_VSYIN
C425 0.1u/10 A_VVIN
C443 0.1u/10
C442 0.1u/10
C441 0.1u/10
R418 2.7k
R419 2.7k
L404 ATL7010-A
V+3R3HD
C429 C430 C431 C432 C433 C434 100u/16
(VCY) (VCb) (VCr)
C424 0.1u/10 A_VCRIN
C423 0.1u/10 A_VCBIN
C422 0.1u/10 A_VCYIN
C421 1000p/50
V+3R3HD
C615 0.1u/10
C616 NM
L601 ATL7002-A
C601 100u/16
C619 470p/50
C602 0.1u/10
R621 220
R619 470
LLC
SFL
R613 47
R614 680 (F)
R611 5.6k (F)
R618 10k
R617 NM
R616 NM
R615 NM
C613 0.01u/16
C614 0.1u/10
C617 0.1u/10
C618 NM
L602 ATL7002-A
C612 0.1u/10
C611 100u/16
C610 1u/6.3
C609 0.1u/10
C608 0.1u/10
C607 0.1u/10
C622 470p/50
C606 0.1u/10
IC601 ADV7172KSTZ VIDEO ENCODER
P22 P23 P24 P25 P26 P27 P28 P29
C603 0.1u/10
C620 470p/50
R602 47
R604 47
R605 10k
R606 10k
C604 0.1u/10
C621 470p/50
R601 0
R603 0
HS VS
R607 47
R608 47
R609 680 (F)
R610 5.6k (F)
C605 0.1u/10
VCSCL VCSDA
GNDDH
V+5AHD
L631 ATL7015-A 10u
R631 470
C631 0.1u/10
Q631 2SA1602A(EF)
R634 470 (F)
C633 56p/50
C632 100p/50
R633 220 (F)
(SY)
L641 ATL7015-A 10u
R641 470
C641 0.1u/10
Q641 2SA1602A(EF)
R644 470 (F)
C643 56p/50
C642 100p/50
R643 220 (F)
(SC)
L651 ATL7015-A 10u
R651 470
C651 0.1u/10
Q651 2SA1602A(EF)
R654 470 (F)
C653 56p/50
C652 100p/50
R653 220 (F)
(VCY)
L661 ATL7015-A 10u
R661 470
C661 0.1u/10
Q661 2SA1602A(EF)
R664 470 (F)
C663 56p/50
C662 100p/50
R663 220 (F)
C669 NM
(VCb)
L671 ATL7015-A 10u
R671 470
C671 0.1u/10
Q671 2SA1602A(EF)
R674 470 (F)
C673 56p/50
C672 100p/50
R673 220 (F)
(VCr)
L681 ATL7015-A 10u
R681 470
C681 0.1u/10
Q681 2SA1602A(EF)
R684 470 (F)
C683 56p/50
C682 100p/50
R683 220 (F)
GNDDH

10.10 HDMI NETWORK ASSY (3/6)

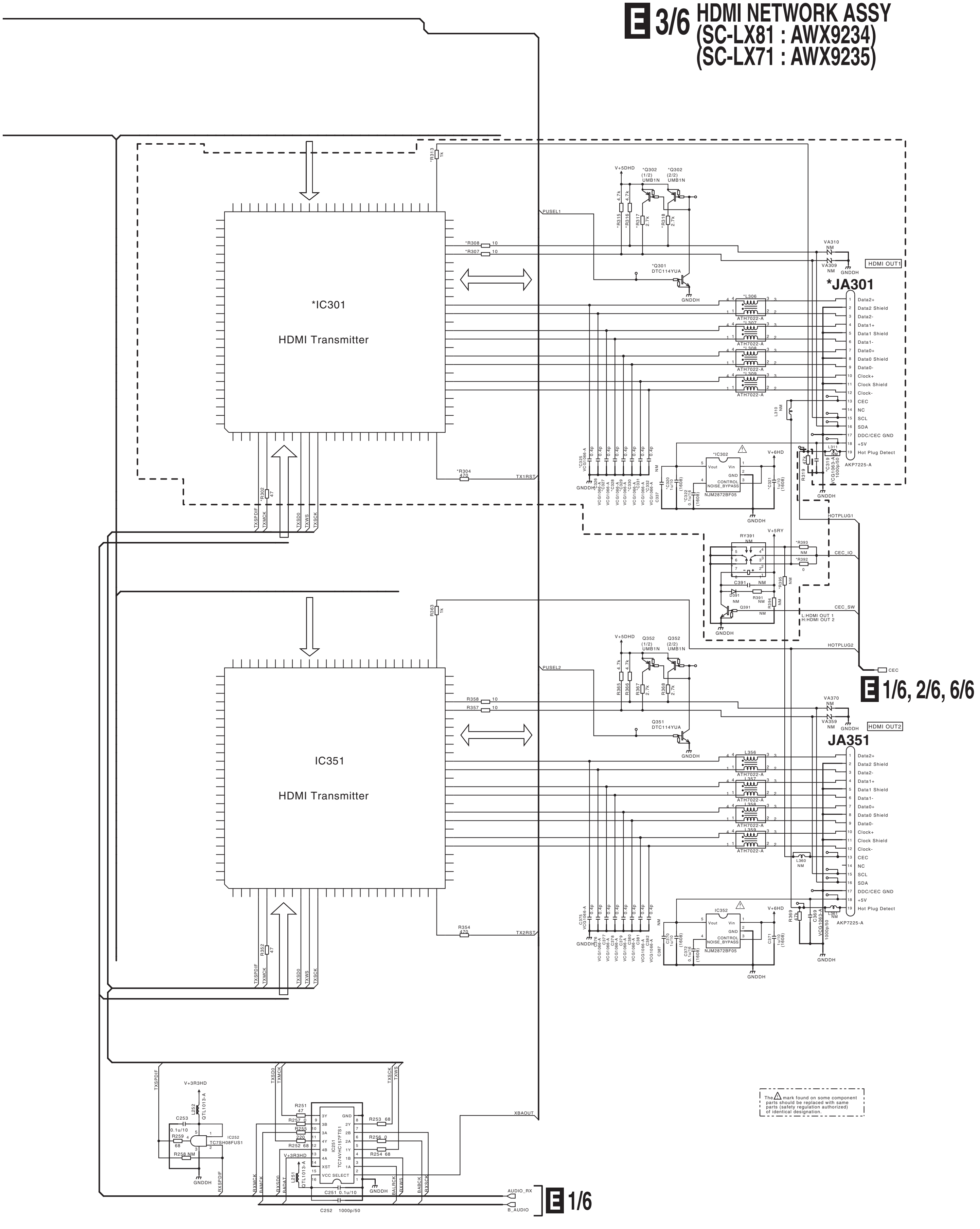

E 1/6, 2/6, 6/6
UC
DV
E 1/6, 2/6
DECDV
E 2/6
XSCTHRU
L:Outut=Input
H:Output=High Z
LLC R1390 0
IC1382 TC7SZ125FU
IC1381 TC74LCX541FTS1
IC1384 TC74LCX541FTS1
IC1383 TC74LCX541FTS1
L1384 QTL1013-A
L1381 QTL1013-A
L1382 QTL1013-A
L1383 QTL1013-A
V+3R3HD
V+1R8HD
GNDDH
C1400 ACH7306-
*C1301 100u/16
L1301 ATL7002-A
L1302 ATL7002-A
C1302 100u/16
X1301 ASS7070-A 13.5M
L1303 ATL7002-A
C1342 100u/16
C1303 DCH1201-A
L1304 ATL7002-A
C1399 VCG1063-A 1000p/50
L1305 ATL7002-A
C1305 100u/16
IC1301
FLI2310-LF-CF
IP Convert/Scaler
VCSCL
VCSDA
XSCRST
HS
VS
F/DE
LLC
DCK
DE
VSYNC
HSYNC
SDDQM
SDCSN
SDBA0
SDBA1
SDCASN
SDRASN
64M SDRAM
IC1351 M12L64322A-6TG
L1351 ATL7002-A
C1352 VCG1063-A 1000p/50

	awx9234	awx9235
C1301	150u	150u

	awx9234	awx9235
C301	10u	NM
C302	10u	NM
C303	10u	NM
C304	10u	NM
C305	10u	NM
C306	1u	NM
C307	0.1u	NM
C308	1u	NM
C309	0.1u	NM
C310	0.01u	NM
C311	1u	NM
C312	0.1u	NM
C313	1u	NM
C314	1u	NM
C315	1u	NM
C316	0.1u	NM
C317	0.1u	NM
C318	1u	NM
C319	1000p	NM
C320	1u	NM
C321	1u	NM
C322	0.1u	NM
C324	0.1u	NM
C325	0.4p	NM
C326	0.4p	NM
C327	0.4p	NM
C328	0.4p	NM
C329	0.4p	NM
C330	0.4p	NM
C331	0.4p	NM
C332	0.4p	NM
C333	470p	NM
C334	470p	NM
C335	470p	NM
C336	470p	NM
R301	15	NM
R302	47	NM
R303	10	NM
R304	470	NM
R305	680	NM
R306	18	NM
R307	10	NM
R308	10	NM
R309	10	NM
R310	10	NM
R312	10k	NM
R313	1k	NM
R314	4.7k	NM
R315	4.7k	NM
R316	4.7k	NM
R317	2.7k	NM
R318	2.7k	NM
R392	0	NM
R393	NM	0
R395	NM	0
L301	ATL7010-A	NM
L302	ATL7010-A	NM
L303	ATL7010-A	NM
L304	ATL7010-A	NM
L305	ATL7010-A	NM
L306	ATH7022-A	NM
L307	ATH7022-A	NM
L308	ATH7022-A	NM
L309	ATH7022-A	NM
IC301	SII9134CTU	NM
IC302	NJM2872BF05	NM
D301	UDZS5R1(B)	NM
JA301	AKP7225-A	NM
Q301	DTC114YUA	NM
Q302	UMB1N	NM

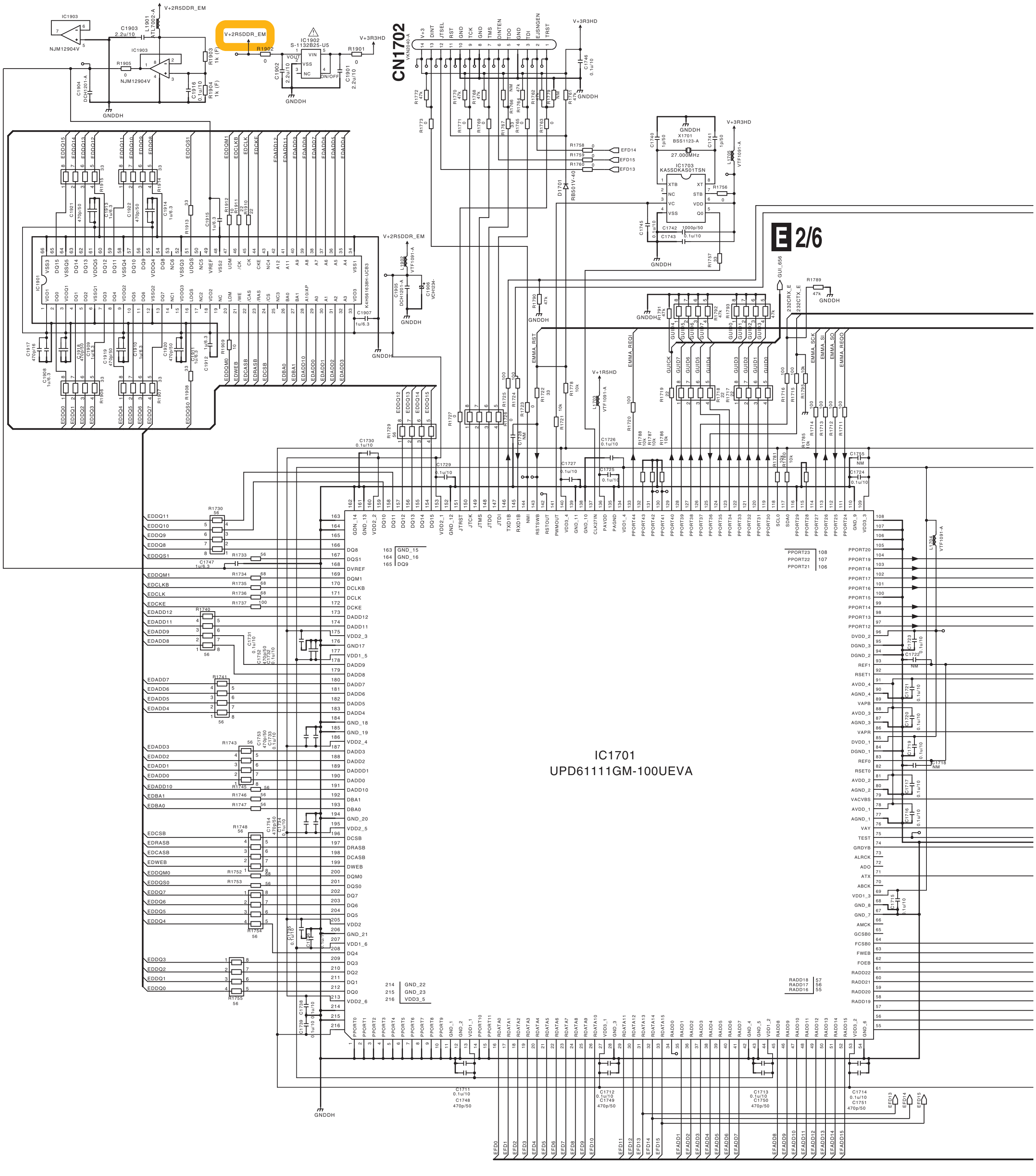
E 3/6

E 3/6 HDMI NETWORK ASSY
(SC-LX81 : AWX9234)
(SC-LX71 : AWX9235)


*IC301
HDMI Transmitter
IC351
HDMI Transmitter
*JA301
HDMI OUT1
JA351
HDMI OUT2
Data2+
Data2 Shield
Data2-
Data1+
Data1 Shield
Data1-
Data0+
Data0 Shield
Data0-
Clock+
Clock Shield
Clock-
CEC
NC
SCL
SDA
DDC/CEC GND
+5V
Hot Plug Detect
AKP7225-A
*L306
*L307
*L308
*L309
L356
L357
L358
L359
ATH7022-A
*IC302
IC352
NJM2872BF05
Vout
Vin
GND
CONTROL
NOISE_BYPASS
V+5DHD
V+6HD
V+5RY
V+3R3HD
*Q302 (1/2) UMB1N
*Q302 (2/2) UMB1N
*Q301 DTC114YUA
Q352 (1/2) UMB1N
Q352 (2/2) UMB1N
Q351 DTC114YUA
RY391 NM
Q391
D391
C391 NM
PUSEL1
PUSEL2
TX1RST
TX2RST
HOTPLUG1
HOTPLUG2
CEC_IO
CEC_SW
L:HDMI OUT 1
H:HDMI OUT 2
CEC
TXSPDIF
TXMCK
TXSD0
TXWS
TXSCK
RXSPDIF
RXMCK
RAMCK
RXSD0
RADAT
RALRCK
RXWS
RABCK
RXSCK
IC251
TC74VHC157FTS1
VCC SELECT
IC252
TC7SH08FUS1
L251
L252
QTL1013-A
C251 0.1u/10
C252 1000p/50
C253
XBAOUT
AUDIO_RX
B_AUDIO
GNDDH
E 1/6, 2/6, 6/6
E 1/6

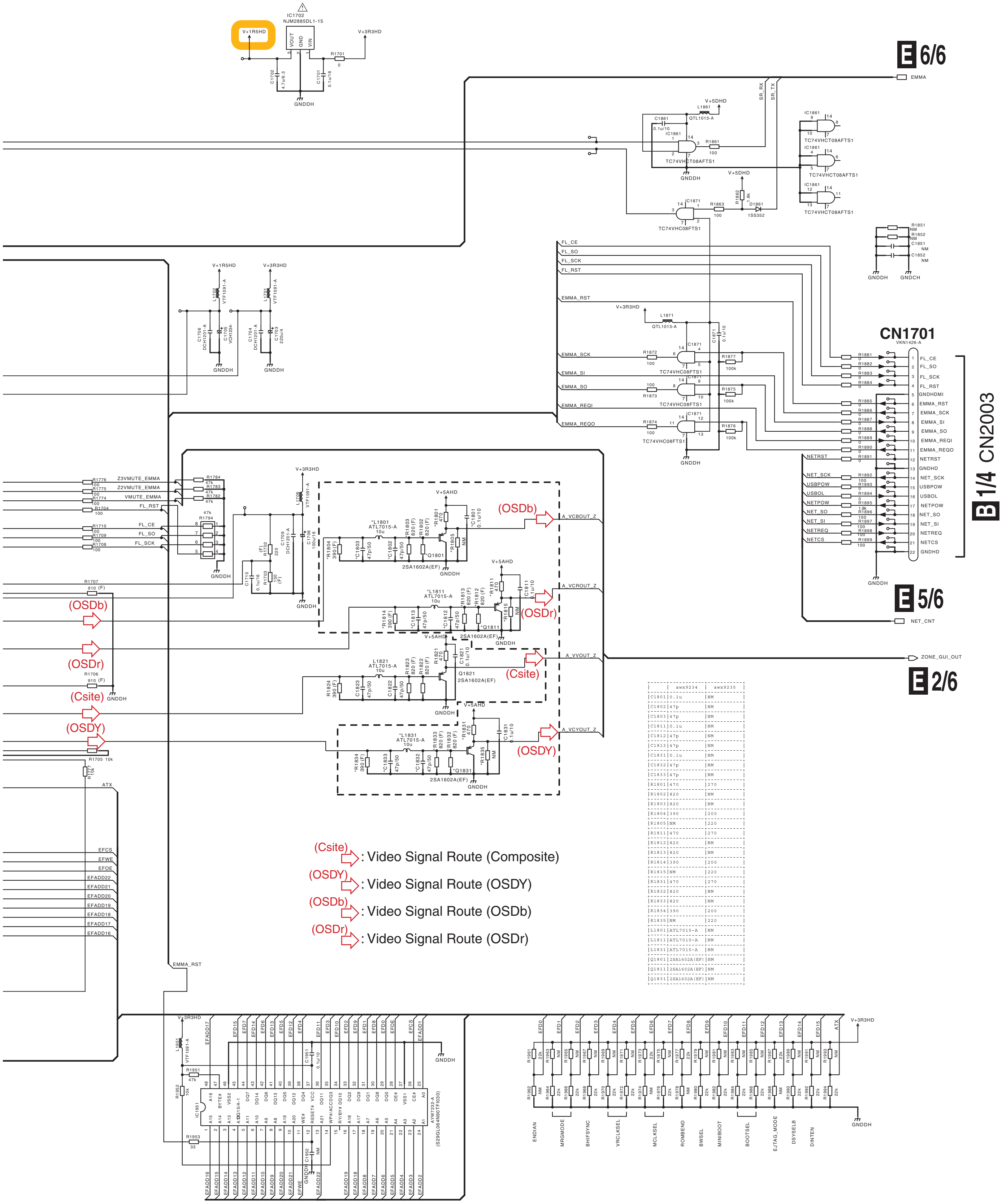
The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

10.11 HDMI NETWORK ASSY (4/6)


A
B
C
D
E
F
IC1903
NJM12904V
V+2R5DDR_EM
C1903 2.2u/10
L1901 VTL1902-A
R1905 0
C1904 DCH1201-A
C1916 0.1u/10
R1903 1k (F)
R1904 1k (F)
GNDDH
R1902 0
IC1902 S-1132B25-U5
VOUT
VIN
VSS
NC
ON/OFF
C1902 2.2u/10
C1901 2.2u/10
R1901 0
V+3R3HD
CN1702
VKN1240-A
V+3
DINT
JTSEL
RST
GND
TCK
TMS
DINTEN
TDO
TDI
EJSNGEN
TRST
V+3R3HD
C1746 0.1u/10
X1701 BSS1123-A
27.000MHz
IC1703 KA5SDKAS01TSN
C1740 1p/50
C1741 1p/50
L1705 VTF1091-A
R1756
C1745 0.1u/10
C1742 1000p/50
C1743 0.1u/10
R1757 33
D1701 RB501V-40
R1758
R1759
R1760
EFD14
EFD15
EFD13
E 2/6
GUI_656
R1789 47k
232CRX_E
232CTX_E
IC1901 K4H561638H-UC83
VSS3
DQ15
VSSQ5
DQ14
DQ13
VDDQ5
DQ12
DQ11
VSSQ4
DQ10
DQ9
VDDQ4
DQ8
NC6
VSSQ3
UDQS
NC5
VREF
VSS2
UDM
/CK
CK
CKE
NC4
A12
A11
A9
A8
A7
A6
A5
A4
VSS1
VDD1
DQ0
VDDQ1
DQ1
DQ2
VSSQ1
DQ3
DQ4
VDDQ2
DQ5
DQ6
VSSQ2
DQ7
NC1
VDDQ3
LDQS
NC2
VDD2
NC
LDM
/WE
/CAS
/RAS
/CS
NC3
BA0
BA1
A10/AP
A0
A1
A2
A3
VDD3
EDDQ0
EDDQ1
EDDQ2
EDDQ3
EDDQ4
EDDQ5
EDDQ6
EDDQ7
EDDQ8
EDDQ9
EDDQ10
EDDQ11
EDDQ12
EDDQ13
EDDQ14
EDDQ15
EDDQS0
EDDQS1
EDDQM0
EDDQM1
EDCLKB
EDCLK
EDCKE
EDWEB
EDCASB
EDRASB
EDCSB
EDBA0
EDBA1
EDADD0
EDADD1
EDADD2
EDADD3
EDADD4
EDADD5
EDADD6
EDADD7
EDADD8
EDADD9
EDADD10
EDADD11
EDADD12
L1902 VTF1091-A
C1905 DCH1201-A
C1906 VCH1234-
C1907 1u/6.3
EMMA_RST
EMMA_REQI
EMMA_SCK
EMMA_SI
EMMA_SO
EMMA_REQO
GUICK
GUID0
GUID1
GUID2
GUID3
GUID4
GUID5
GUID6
GUID7
V+1R5HD
L1703 VTF1091-A
IC1701
UPD61111GM-100UEVA
PPORT0 – PPORT44
RDATA0 – RDATA15
RADD0 – RADD22
DQ0 – DQ15
DQS0
DQS1
DVREF
DQM0
DQM1
DCLKB
DCLK
DCKE
DADD0 – DADD12
DBA0
DBA1
DCSB
DRASB
DCASB
DWEB
GND
VDD2
VDD1
VDD3
JTRST
JTCK
JTMS
JTDO
JTDI
TXD1B
RXD1B
NMI
RSTSWB
RSTOUT
PWMOUT
CLK27IN
PAVDD
PAGND
SCL0
SDA0
DVDD_2
DGND_3
DGND_2
REF1
RSET1
AVDD_4
AGND_4
VAPB
AVDD_3
AGND_3
VAPR
REF0
RSET0
AVDD_2
AGND_2
VACVBS
AVDD_1
AGND_1
VAY
TEST
GRDYB
ALRCK
ADO
ATX
ABCK
AMCK
GCSB0
FCSB0
FWEB
FOEB
L1704 VTF1091-A
C1711 0.1u/10
C1748 470p/50
C1712 0.1u/10
C1749 470p/50
C1713 0.1u/10
C1750 470p/50
C1714 0.1u/10
C1751 470p/50
EFD0 – EFD15
EFADD1 – EFADD15
GNDDH

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

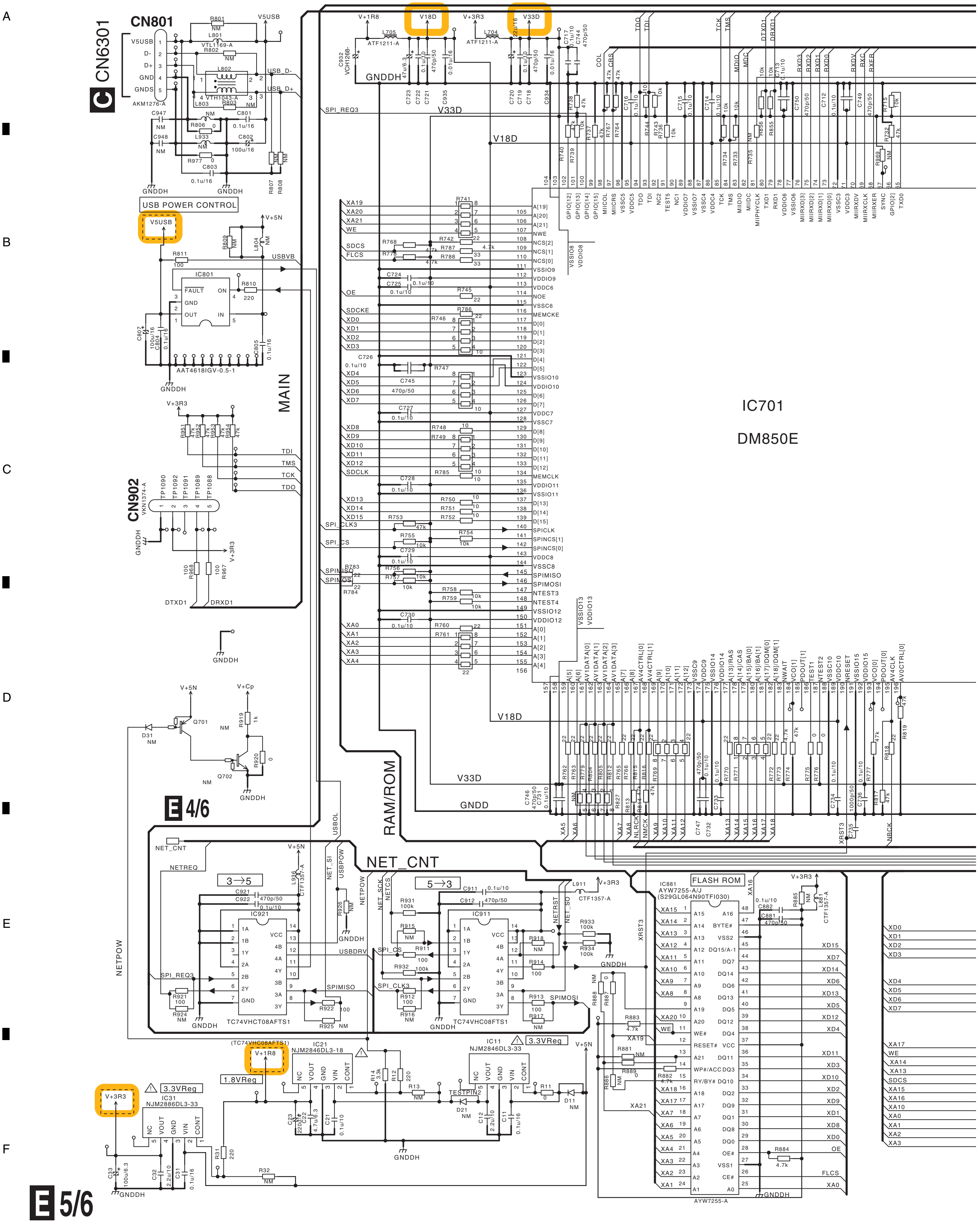
E 4/6 HDMI NETWORK ASSY
(SC-LX81 : AWX9234)
(SC-LX71 : AWX9235)


A
B
C
D
E
F
E 6/6
EMMA
E 5/6
NET_CNT
E 2/6
ZONE_GUI_OUT
B 1/4 CN2003
CN1701
VKN1426-A
1 FL_CE
2 FL_SO
3 FL_SCK
4 FL_RST
5 GNDHDMI
6 EMMA_RST
7 EMMA_SCK
8 EMMA_SI
9 EMMA_SO
10 EMMA_REQI
11 EMMA_REQO
12 NETRST
13 GNDHD
14 NET_SCK
15 USBPOW
16 USBOL
17 NETPOW
18 NET_SO
19 NET_SI
20 NETREQ
21 NETCS
22 GNDHD
IC1702
NJM2885DL1-15
V+1R5HD
V+3R3HD
V+5DHD
V+5AHD
GNDDH
GNDCH
IC1861
TC74VHCT08AFTS1
IC1871
TC74VHC08FTS1
L1861
QTL1013-A
L1871
QTL1013-A
D1861
1SS352
SR_RX
SR_TX
L1801
ATL7015-A
Q1801
2SA1602A(EF)
L1811
Q1811
L1821
Q1821
L1831
Q1831
A_VCBOUT_Z
A_VCROUT_Z
A_VVOUT_Z
A_VCYOUT_Z
(OSDb)
(OSDr)
(Csite)
(OSDY)
Z3VMUTE_EMMA
Z2VMUTE_EMMA
VMUTE_EMMA
FL_RST
FL_CE
FL_SO
FL_SCK
ATX
EFCS
EFWE
EFOE
EFADD22
EFADD21
EFADD20
EFADD19
EFADD18
EFADD17
EFADD16
EMMA_RST
IC1951
AYW7232-A
(S29GL064N90TFI030)
ENDIAN
MRGMODE
BHIFSYNC
VRCLKSEL
MCLKSEL
ROMBEND
BWSEL
MINIBOOT
BOOTSEL
EJTAG_MODE
DSYSELB
DINTEN

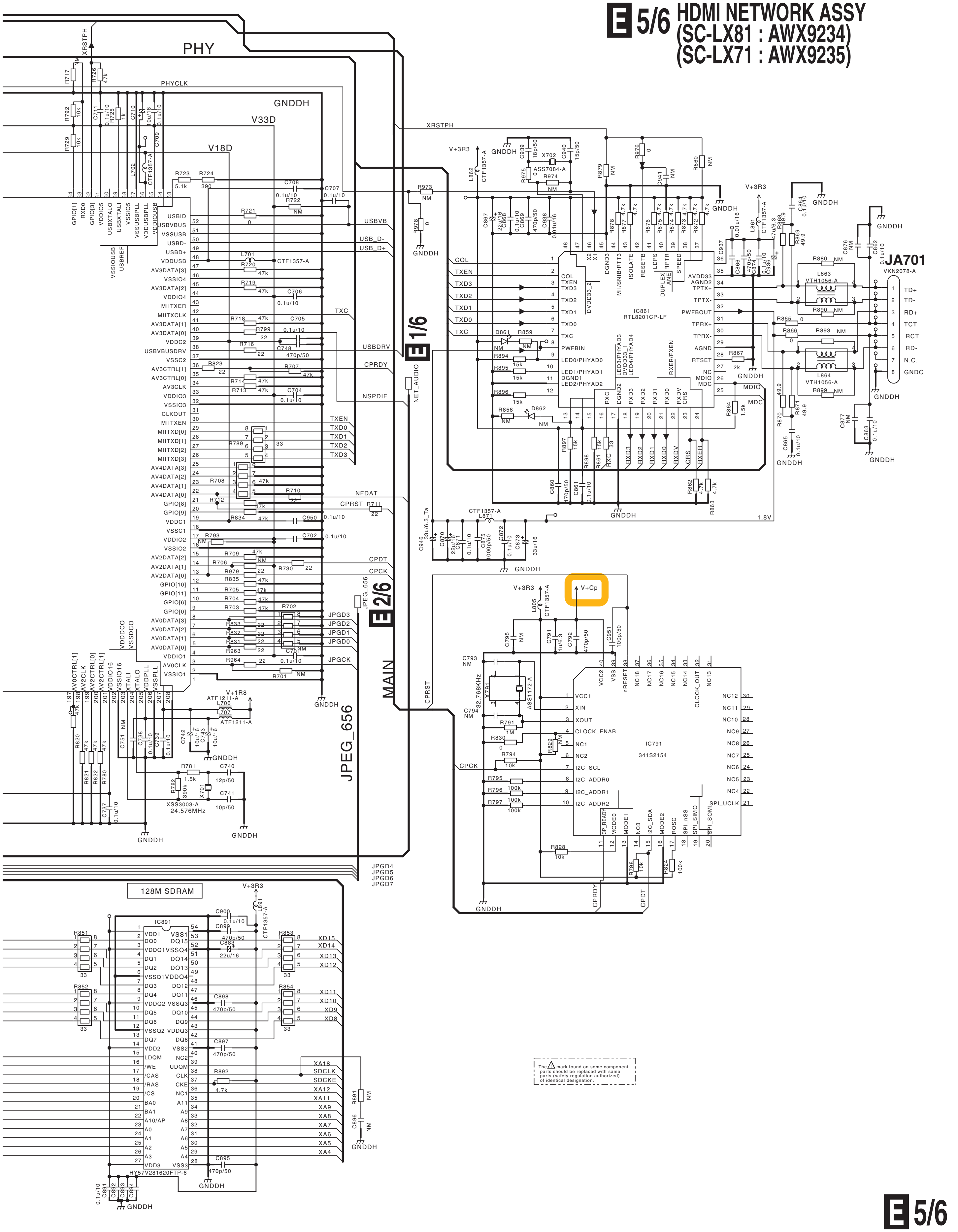
	awx9234	awx9235
C1801	0.1u	NM
C1802	47p	NM
C1803	47p	NM
C1811	0.1u	NM
C1812	47p	NM
C1813	47p	NM
C1831	0.1u	NM
C1832	47p	NM
C1833	47p	NM
R1801	470	270
R1802	820	NM
R1803	820	NM
R1804	390	200
R1805	NM	220
R1811	470	270
R1812	820	NM
R1813	820	NM
R1814	390	200
R1815	NM	220
R1831	470	270
R1832	820	NM
R1833	820	NM
R1834	390	200
R1835	NM	220
L1801	ATL7015-A	NM
L1811	ATL7015-A	NM
L1831	ATL7015-A	NM
Q1801	2SA1602A(EF)	NM
Q1811	2SA1602A(EF)	NM
Q1831	2SA1602A(EF)	NM

(Csite) : Video Signal Route (Composite)
(OSDY) : Video Signal Route (OSDY)
(OSDb) : Video Signal Route (OSDb)
(OSDr) : Video Signal Route (OSDr)

10.12 HDMI NETWORK ASSY (5/6)

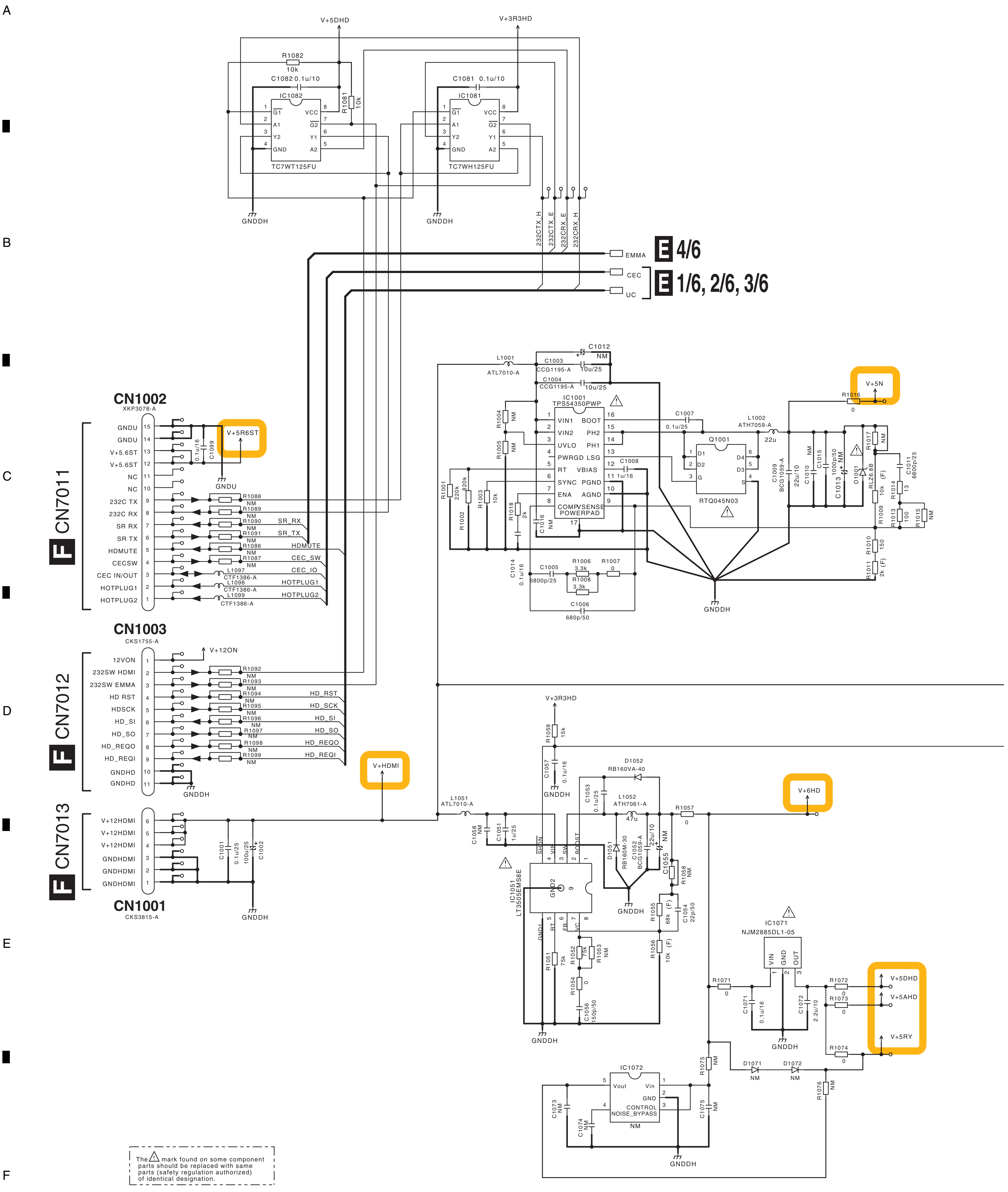

CN6301
C
CN801
AKM1276-A
V5USB
D-
D+
GND
GNDS
R801 NM
L801 VTL1169-A
R802 NM
L802
L803
VTH1043-A
R803 NM
USB_D-
USB_D+
C947 NM
R806 0
C801 0.1u/16
C948 NM
L933 NM
C802 100u/16
R977 0
C803 0.1u/16
R807
R808
GNDDH
USB POWER CONTROL
V5USB
V+5N
R809 NM
L804 NM
R811 100
USBVB
IC801
AAT4618IGV-0.5-1
FAULT
ON
GND
OUT
IN
R810 220
C807 100u/16
C804 0.1u/16
C805 0.1u/16
MAIN
V+3R3
R951 47k
R952 47k
R953 47k
R954 47k
TDI
TMS
TCK
TDO
CN902
VKN1374-A
TP1090
TP1092
TP1091
TP1089
TP1088
R968 100
R967 100
DTXD1
DRXD1
V+5N
V+Cp
D31 NM
Q701
NM
R919 1k
R920 0
Q702 NM
E 4/6
V+1R8
V18D
L705 ATF1211-A
V+3R3
V33D
L704 ATF1211-A
C932 VCH1268-
47u/6.3
0.1u/10
470p/50
0.01u/16
22u/16
C717 0.1u/10
C744 470p/50
C723 C722 C721 C935
C720 C719 C718 C934
GNDDH
SPI_REQ3
V18D
V33D
IC701
DM850E
XA19 XA20 XA21 WE SDCS FLCS
R741 R742 R787 R788 R768 R773
OE SDCKE XD0 XD1 XD2 XD3 XD4 XD5 XD6 XD7 XD8 XD9 XD10 XD11 XD12 SDCLK XD13 XD14 XD15
SPI_CLK3
SPI_CS
SPIMISO
SPIMOSI
XA0 XA1 XA2 XA3 XA4
A[19] A[20] A[21] NWE NCS[2] NCS[1] NCS[0] VSSIO9 VDDIO9 VDDC6 NOE VSSC6 MEMCKE D[0] D[1] D[2] D[3] D[4] D[5] VSSIO10 VDDIO10 D[6] D[7] VDDC7 VSSC7 D[8] D[9] D[10] D[11] D[12] MEMCLK VDDIO11 VSSIO11 D[13] D[14] D[15] SPICLK SPINCS[1] SPINCS[0] VDDC8 VSSC8 SPIMISO SPIMOSI NTEST3 NTEST4 VSSIO12 VDDIO12 A[0] A[1] A[2] A[3] A[4]
GPIO[12] GPIO[13] GPIO[14] GPIO[15] MIICOL MIICRS VSSC5 VDDC5 TDO TDI NC2 TEST5 NC1 VDDIO7 VSSIO7 VSSC4 VDDC4 TCK TMS MIIDIO MIIDC MIIPHYCLK TXD1 RXD1 VDDIO6 VSSIO6 MIIRXD[3] MIIRXD[2] MIIRXD[1] MIIRXD[0] VSSC3 VDDC3 MIIRXDV MIIRXCLK MIIRXER SYNC GPIO[2] TXD0
VSSIO8 VDDIO8
VSSIO13 VDDIO13
A[5] A[6] AV1DATA[0] AV1DATA[1] AV1DATA[2] AV1DATA[3] A[7] A[8] AV4CTRL[0] AV4CTRL[1] A[9] A[10] A[11] A[12] VSSC9 VDDC9 VSSIO14 VDDIO14 A[13]/RAS A[14]/CAS A[15]/BA[0] A[16]/BA[1] A[17]/DQM[0] A[18]/DQM[1] NWAIT VCO[1] PDOUT[1] TEST1 NTEST2 VSSC10 VDDC10 NRESET VSSIO15 VDDIO15 VCO[0] PDOUT[0] AV4CLK AV0CTRL[0]
COL CRS TDO TDI TCK TMS DTXD1 DRXD1 MDIO MDC RXD3 RXD2 RXD1 RXD0 RXDV RXC RXER
XA5 XA6 XA7 XA8 NLRCK NMCK XA9 XA10 XA11 XA12 XA13 XA14 XA15 XA16 XA17 XA18 XRST3 NBCK
GNDD
RAM/ROM
USBOL
NET_CNT
V+5N
NETREQ
3→5
5→3
L936 CTF1357-A
C921 C922 470p/50 0.1u/10
IC921
TC74VHCT08AFTS1
1A 1B 1Y 2A 2B 2Y GND VCC 4B 4A 4Y 3B 3A 3Y
SPI_REQ3
R921 100
R924 NM
R922 100
R925 NM
SPIMISO
NETPOW
NET_SI
USBPOW
R926 NM
USBDRV
NET_SCK
NETCS
C911 0.1u/10
C912 470p/50
IC911
TC74VHC08FTS1
R931 100k
R915 NM
R911 100
R932 100k
SPI_CS
SPI_CLK3
R912 100
R916 NM
R918 NM
R914 100
R913 100
R917 NM
SPIMOSI
NETRST
NET_SO
R933 100k
R934 100k
L911 CTF1357-A
V+3R3
XRST3
(TC74VHC08AFTS1)
V+1R8
1.8VReg
IC21 NJM2846DL3-18
NC VOUT GND VIN CONT
R14 3.3k
R12 220
R13 NM
C23 220u/4
C22 4.7u/6.3
C21 0.1u/16
GNDDH
IC11 NJM2846DL3-33
3.3VReg
TESTPIN2
D21 NM
R11 0
D11 NM
C12 2.2u/10
C11 0.1u/16
V+5N
V+3R3
3.3VReg
IC31 NJM2886DL3-33
C33 100u/6.3
C32 2.2u/10
C31 0.1u/16
R31 220
R32 NM
GNDDH
E 5/6
IC881 AYW7255-A/J (S29GL064N90TFI030)
FLASH ROM
AYW7255-A
A15 A14 A13 A12 A11 A10 A9 A8 A19 A20 WE# RESET# A21 WP#/ACC RY/BY# A18 A17 A7 A6 A5 A4 A3 A2 A1
A16 BYTE# VSS2 DQ15/A-1 DQ7 DQ14 DQ6 DQ13 DQ5 DQ12 DQ4 VCC DQ11 DQ3 DQ10 DQ2 DQ9 DQ1 DQ8 DQ0 OE# VSS1 CE# A0
C882 0.1u/10
C881 470p/50
R885 NM
L881 CTF1357-A
R888 NM
R887 0
R883 4.7k
R881 NM
R882 4.7k
R889 0
R886 NM
R884 4.7k
XA21
XD0 XD1 XD2 XD3 XD15 XD7 XD14 XD6 XD4 XD5 XD6 XD7 XD13 XD5 XD12 XD4 XA17 WE XA14 XA13 SDCS XA15 XA16 XA10 XA0 XA1 XA2 XA3 XD11 XD3 XD10 XD2 XD9 XD1 XD8 XD0 OE FLCS XA0
A B C D E F

E 5/6 HDMI NETWORK ASSY
(SC-LX81 : AWX9234)
(SC-LX71 : AWX9235)


A
B
C
D
E
F
PHY
PHYCLK
GNDDH
V33D
V18D
XRSTPH
V+3R3
V+1R8
V+Cp
1.8V
IC861
RTL8201CP-LF
X702
ASS7084-A
JA701
VKN2078-A
L863
VTH1056-A
L864
VTH1056-A
TD+
TD-
RD+
TCT
RCT
RD-
N.C.
GNDC
COL
TXEN
TXD3
TXD2
TXD1
TXD0
TXC
MDIO
MDC
E 1/6
E 2/6
MAIN
JPEG_656
NET_AUDIO
USBVB
USB_D-
USB_D+
USBDRV
CPRDY
NSPDIF
TXD0
TXD1
TXD2
TXD3
NFDAT
CPRST
CPDT
CPCK
JPGD3
JPGD2
JPGD1
JPGD0
JPGCK
JPGD4
JPGD5
JPGD6
JPGD7
X701
XSS3003-A
24.576MHz
IC791
341S2154
X791
32.768KHz
ASS1172-A
CTF1357-A
ATF1211-A
128M SDRAM
IC891
HY57V281620FTP-6
XD15
XD14
XD13
XD12
XD11
XD10
XD9
XD8
XA18
SDCLK
SDCKE
XA12
XA11
XA9
XA8
XA7
XA6
XA5
XA4

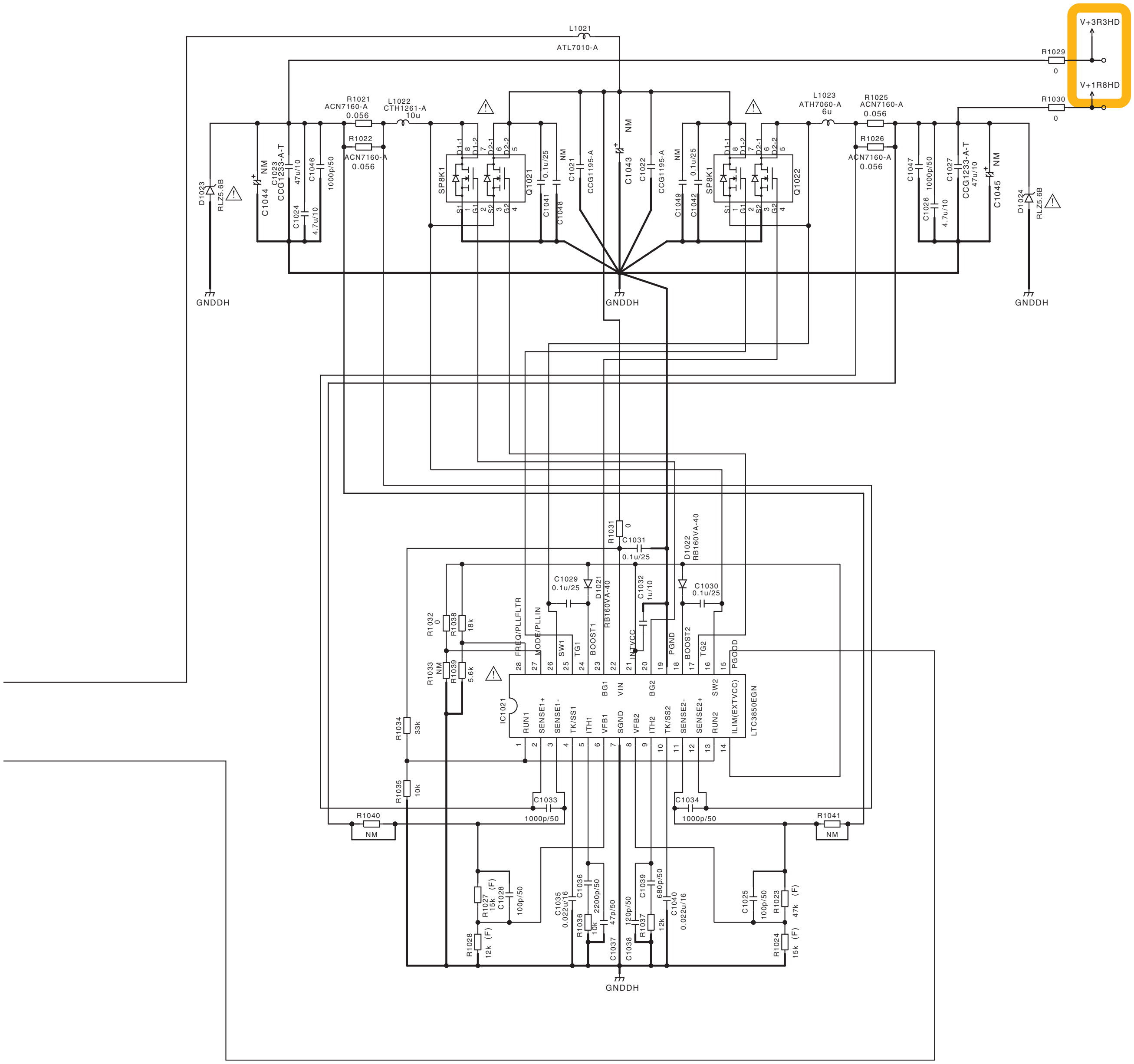
The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

10.13 HDMI NETWORK ASSY (6/6)

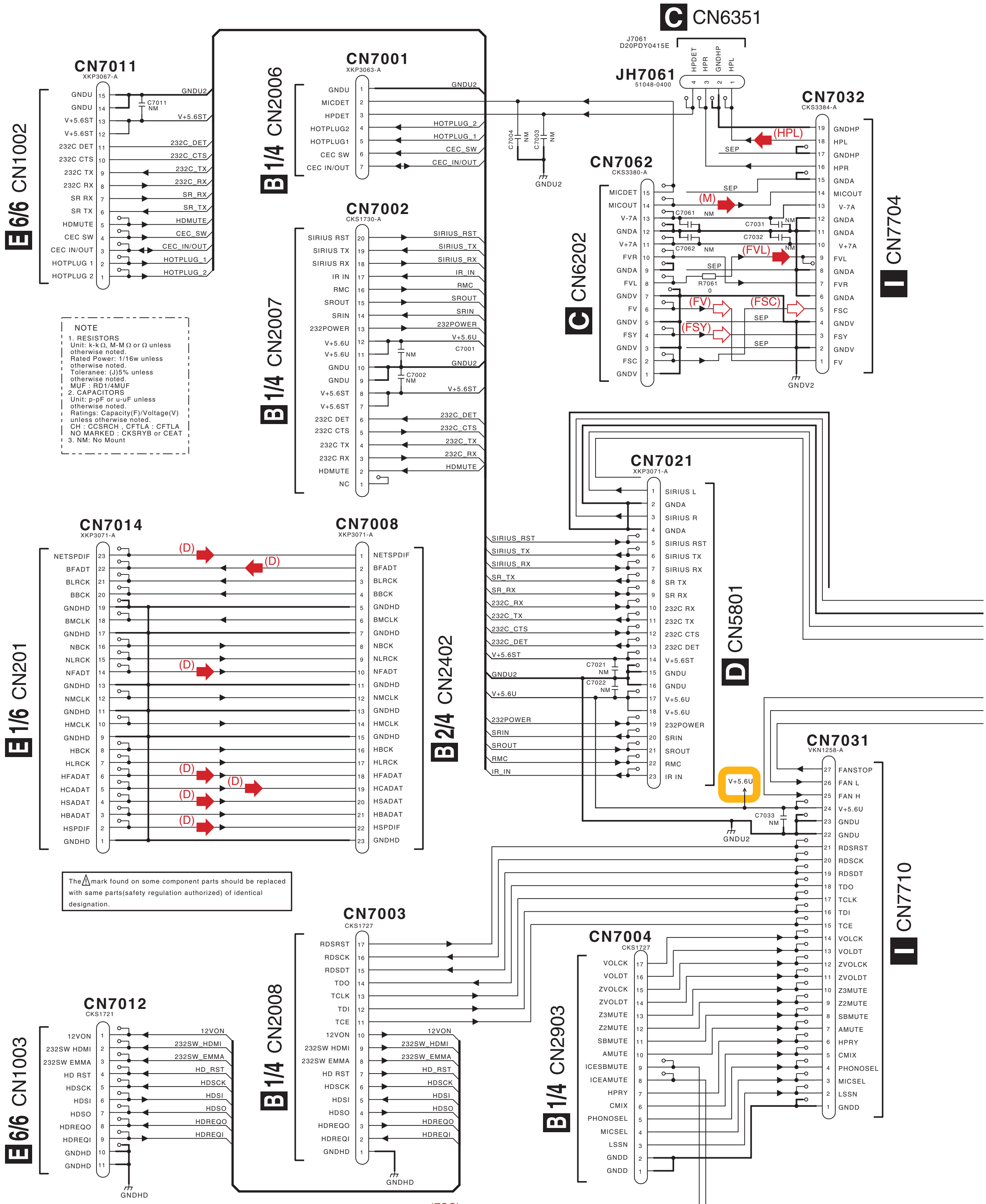

A
B
C
D
E
F
V+5DHD
V+3R3HD
R1082
10k
C1082 0.1u/10
IC1082
R1081
10k
G1
A1
Y2
GND
VCC
G2
Y1
A2
TC7WT125FU
C1081 0.1u/10
IC1081
TC7WH125FU
GNDDH
232CTX_H
232CTX_E
232CRX_E
232CRX_H
EMMA
CEC
UC
E 4/6
E 1/6, 2/6, 3/6
CN1002
XKP3078-A
F CN7011
GNDU
V+5.6ST
NC
232C TX
232C RX
SR RX
SR TX
HDMUTE
CECSW
CEC IN/OUT
HOTPLUG1
HOTPLUG2
0.1u/16
C1099
V+5R6ST
GNDU
R1088
R1089
R1090
R1091
R1086
R1087
NM
L1097
L1098
L1099
CTF1386-A
SR_RX
SR_TX
HDMUTE
CEC_SW
CEC_IO
HOTPLUG1
HOTPLUG2
CN1003
CKS1755-A
F CN7012
12VON
232SW HDMI
232SW EMMA
HD RST
HDSCK
HD_SI
HD_SO
HD_REQO
HD_REQI
GNDHD
V+12ON
R1092
R1093
R1094
R1095
R1096
R1097
R1098
R1099
HD_RST
HD_SCK
HD_SI
HD_SO
HD_REQO
HD_REQI
GNDDH
F CN7013
V+12HDMI
GNDHDMI
CN1001
CKS3815-A
C1001
0.1u/25
100u/25
C1002
V+HDMI
L1001
ATL7010-A
C1003
CCG1195-A
10u/25
C1004
C1012
NM
IC1001
TPS54350PWP
VIN1
VIN2
UVLO
PWRGD
RT
SYNC
ENA
COMP/SENSE
POWERPAD
BOOT
PH2
PH1
LSG
VBIAS
PGND
AGND
C1007
0.1u/25
L1002
ATH7059-A
22u
Q1001
RTQ045N03
D1
D2
G
D4
D3
S
C1008
1u/16
R1004
R1005
R1001
220k
R1002
R1003
10k
820k
R1018
2k
C1016
C1014
0.1u/16
C1005
6800p/25
R1006
3.3k
R1007
0
R1008
3.3k
C1006
680p/50
GNDDH
V+5N
R1016
0
C1009
BCG1059-A
22u/10
C1010
C1015
1000p/50
C1013
D1001
RLZ6.8B
R1017
R1014
10k
13
C1011
6800p/25
R1009
R1013
100
R1015
R1010
150
R1011
2k
(F)
V+3R3HD
R1059
15k
C1057
0.1u/16
D1052
RB160VA-40
C1053
0.1u/25
L1052
ATH7061-A
47u
L1051
ATL7010-A
C1058
C1051
1u/25
IC1051
LT3505EMS8E
SHDN
VIN
SW
BOOST
GND2
GND1
RT
FB
VC
D1051
RB160M-30
C1052
BCG1059-A
22u/10
C1055
R1058
R1055
68k
C1054
22p/50
R1056
10k
R1051
75k
R1052
75k
R1053
R1054
0
C1056
150p/50
R1057
0
V+6HD
IC1071
NJM2885DL1-05
VIN
GND
OUT
R1071
0
C1071
0.1u/16
C1072
2.2u/10
R1072
R1073
R1074
V+5DHD
V+5AHD
V+5RY
R1075
R1076
D1071
D1072
IC1072
Vout
Vin
GND
CONTROL
NOISE_BYPASS
C1073
C1074
C1075
NM

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

E 6/6 HDMI NETWORK ASSY (SC-LX81 : AWX9234) (SC-LX71 : AWX9235)


V+3R3HD
V+1R8HD
R1029
0
R1030
0
L1021
ATL7010-A
R1021
ACN7160-A
0.056
L1022
CTH1261-A
10u
R1022
ACN7160-A
0.056
L1023
ATH7060-A
6u
R1025
ACN7160-A
0.056
R1026
ACN7160-A
0.056
D1023
RLZ5.6B
D1024
RLZ5.6B
C1044
NM
C1023
CCG1233-A-T
47u/10
C1046
1000p/50
C1024
4.7u/10
SP8K1
Q1021
D1-1
D1-2
D2-1
D2-2
S1
G1
S2
G2
C1041
0.1u/25
C1048
NM
C1021
CCG1195-A
C1043
NM
C1022
CCG1195-A
C1049
NM
C1042
0.1u/25
SP8K1
Q1022
C1047
1000p/50
C1026
4.7u/10
C1027
CCG1233-A-T
47u/10
C1045
NM
GNDDH
GNDDH
GNDDH
R1031
0
C1031
0.1u/25
D1022
RB160VA-40
C1029
0.1u/25
D1021
RB160VA-40
C1032
1u/10
C1030
0.1u/25
R1032
0
R1038
18k
R1033
NM
R1039
5.6k
R1034
33k
R1035
10k
IC1021
LTC3850EGN
FREQ/PLLFLTR
MODE/PLLIN
SW1
TG1
BOOST1
BG1
VIN
INTVCC
BG2
PGND
BOOST2
TG2
SW2
PGOOD
RUN1
SENSE1+
SENSE1-
TK/SS1
ITH1
VFB1
SGND
VFB2
ITH2
TK/SS2
SENSE2-
SENSE2+
RUN2
ILIM(EXTVCC)
C1033
1000p/50
C1034
1000p/50
R1040
NM
R1041
NM
R1027
15k (F)
C1028
100p/50
R1028
12k (F)
C1035
0.022u/16
C1036
2200p/50
R1036
10k
C1037
47p/50
C1038
120p/50
C1039
680p/50
R1037
12k
C1040
0.022u/16
C1025
100p/50
R1023
47k (F)
R1024
15k (F)
GNDDH

10.14 INTERFACE ASSY

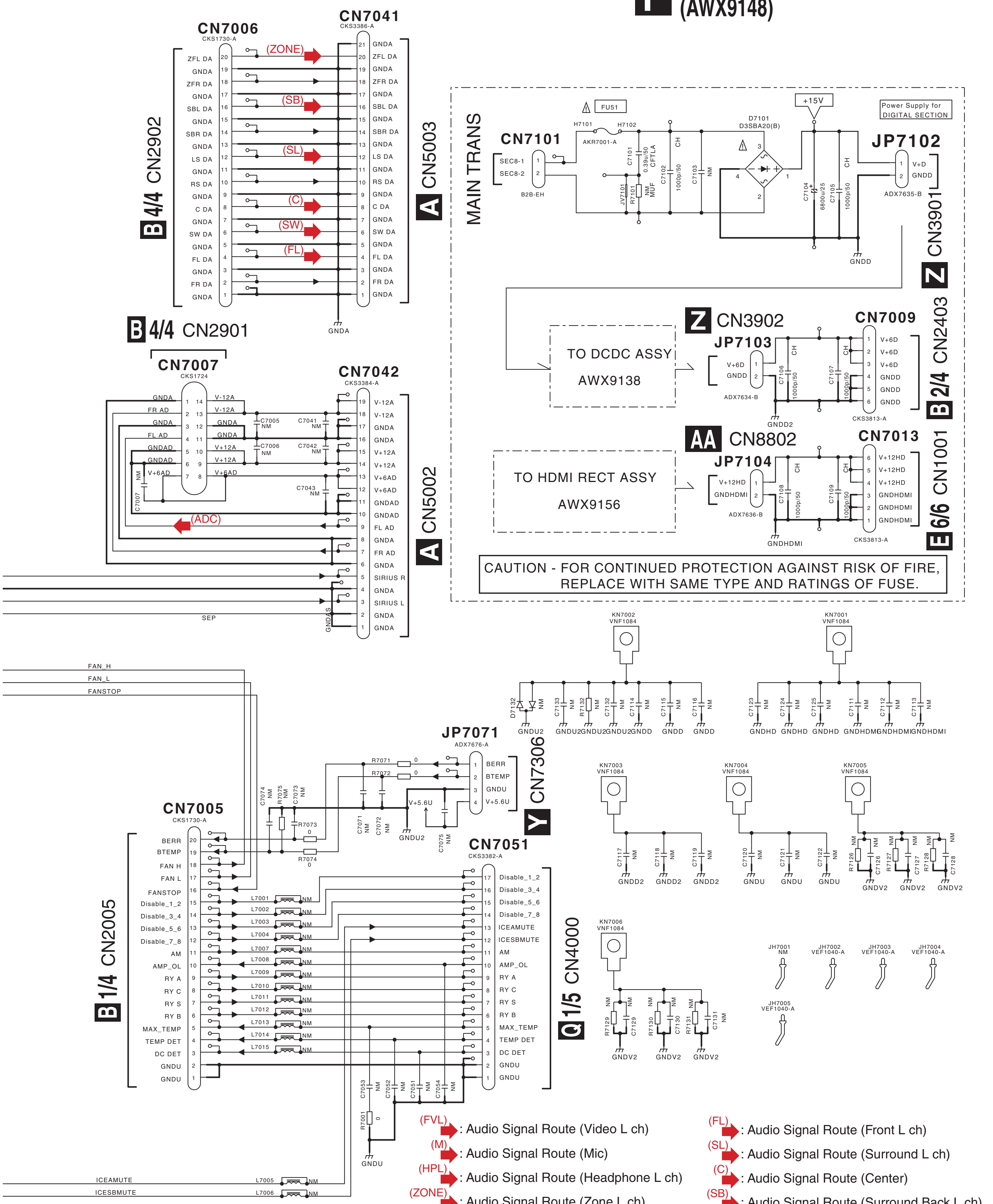

C CN6351
J7061
D20PDY0415E
JH7061
51048-0400
HPDET
HPR
GNDHP
HPL
CN7011
XKP3067-A
E 6/6 CN1002
CN7001
XKP3063-A
B 1/4 CN2006
CN7002
CKS1730-A
B 1/4 CN2007
CN7062
CKS3380-A
C CN6202
CN7032
CKS3384-A
I CN7704
CN7021
XKP3071-A
D CN5801
CN7014
XKP3071-A
E 1/6 CN201
CN7008
XKP3071-A
B 2/4 CN2402
CN7031
VKN1258-A
I CN7710
CN7003
CKS1727
B 1/4 CN2008
CN7004
CKS1727
B 1/4 CN2903
CN7012
CKS1721
E 6/6 CN1003
GNDU2
GNDV2
GNDHD
(HPL)
(M)
(FVL)
(FV)
(FSC)
(FSY)
(D)
V+5.6U
SEP
NM

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
MUF : RD1/4MUF
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH , CFTLA : CFTLA
NO MARKED : CKSRYB or CEAT
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

(FSC) ⇨ : S-Video Signal Route (Front C)
(FSY) ⇨ : S-Video Signal Route (Front Y)
(FV) ⇨ : Video Signal Route (Video)
(D) ➡ : Audio Data Route

F INTERFACE ASSY (AWX9148)



CN7006 CKS1730-A
B 4/4 CN2902
ZFL DA
GNDA
ZFR DA
SBL DA
SBR DA
LS DA
RS DA
C DA
SW DA
FL DA
FR DA
(ZONE)
(SB)
(SL)
(C)
(SW)
(FL)
CN7041 CKS3386-A
A CN5003
GNDA
B 4/4 CN2901
CN7007 CKS1724
V-12A
V+12A
V+6AD
GNDAD
FL AD
FR AD
C7005 NM
C7041 NM
C7006 NM
C7042 NM
C7043 NM
C7007 NM
(ADC)
CN7042 CKS3384-A
A CN5002
SIRIUS R
SIRIUS L
SEP
GNDAS
FAN_H
FAN_L
FANSTOP
MAIN TRANS
CN7101
SEC8-1
SEC8-2
B2B-EH
FU51
H7101
H7102
AKR7001-A
C7101 0.39u/50 CFTLA
JV7101
R7101 NM MUF
C7102 1000p/50
CH
C7103 NM
D7101 D3SBA20(B)
+15V
Power Supply for DIGITAL SECTION
C7104 6800u/25
C7105 1000p/50
JP7102
V+D
GNDD
ADX7635-B
Z CN3901
TO DCDC ASSY AWX9138
Z CN3902
JP7103
V+6D
ADX7634-B
C7106 1000p/50
C7107 1000p/50
GNDD2
CN7009
CKS3813-A
B 2/4 CN2403
TO HDMI RECT ASSY AWX9156
AA CN8802
JP7104
V+12HD
GNDHDMI
ADX7636-B
C7108 1000p/50
C7109 1000p/50
CN7013
CKS3813-A
E 6/6 CN1001
CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS OF FUSE.
KN7002 VNF1084
KN7001 VNF1084
D7132
C7133 NM
R7132 NM
C7132 NM
C7114 NM
C7115 NM
C7116 NM
GNDU2
GNDD
C7123 NM
C7124 NM
C7125 NM
C7111 NM
C7112 NM
C7113 NM
GNDHD
GNDHDMI
JP7071 ADX7676-A
BERR
BTEMP
GNDU
V+5.6U
R7071 0
R7072 0
R7073 0
R7074 0
C7074 NM
R7075 NM
C7073 NM
C7071 NM
C7072 NM
C7075 NM
Y CN7306
KN7003 VNF1084
KN7004 VNF1084
KN7005 VNF1084
C7117 NM
C7118 NM
C7119 NM
C7120 NM
C7121 NM
C7122 NM
R7126 NM
C7126 NM
R7127 NM
C7127 NM
R7128 NM
C7128 NM
GNDV2
CN7005 CKS1730-A
B 1/4 CN2005
FAN H
FAN L
FANSTOP
Disable_1_2
Disable_3_4
Disable_5_6
Disable_7_8
AM
AMP_OL
RY A
RY C
RY S
RY B
MAX_TEMP
TEMP DET
DC DET
GNDU
L7001 NM
L7002 NM
L7003 NM
L7004 NM
L7007 NM
L7008 NM
L7009 NM
L7010 NM
L7011 NM
L7012 NM
L7013 NM
L7014 NM
L7015 NM
CN7051 CKS3382-A
ICEAMUTE
ICESBMUTE
Q 1/5 CN4000
KN7006 VNF1084
R7129 NM
C7129 NM
R7130 NM
C7130 NM
R7131 NM
C7131 NM
JH7001 NM
JH7002 VEF1040-A
JH7003 VEF1040-A
JH7004 VEF1040-A
JH7005 VEF1040-A
C7053 NM
C7052 NM
C7051 NM
C7054 NM
R7001 0
L7005 NM
L7006 NM

(FVL) : Audio Signal Route (Video L ch)

(M) : Audio Signal Route (Mic)

(HPL) : Audio Signal Route (Headphone L ch)

(ZONE) : Audio Signal Route (Zone L ch)

(ADC) : Audio Signal Route (ADC L ch)

(FL) : Audio Signal Route (Front L ch)

(SL) : Audio Signal Route (Surround L ch)

(C) : Audio Signal Route (Center)

(SB) : Audio Signal Route (Surround Back L ch)

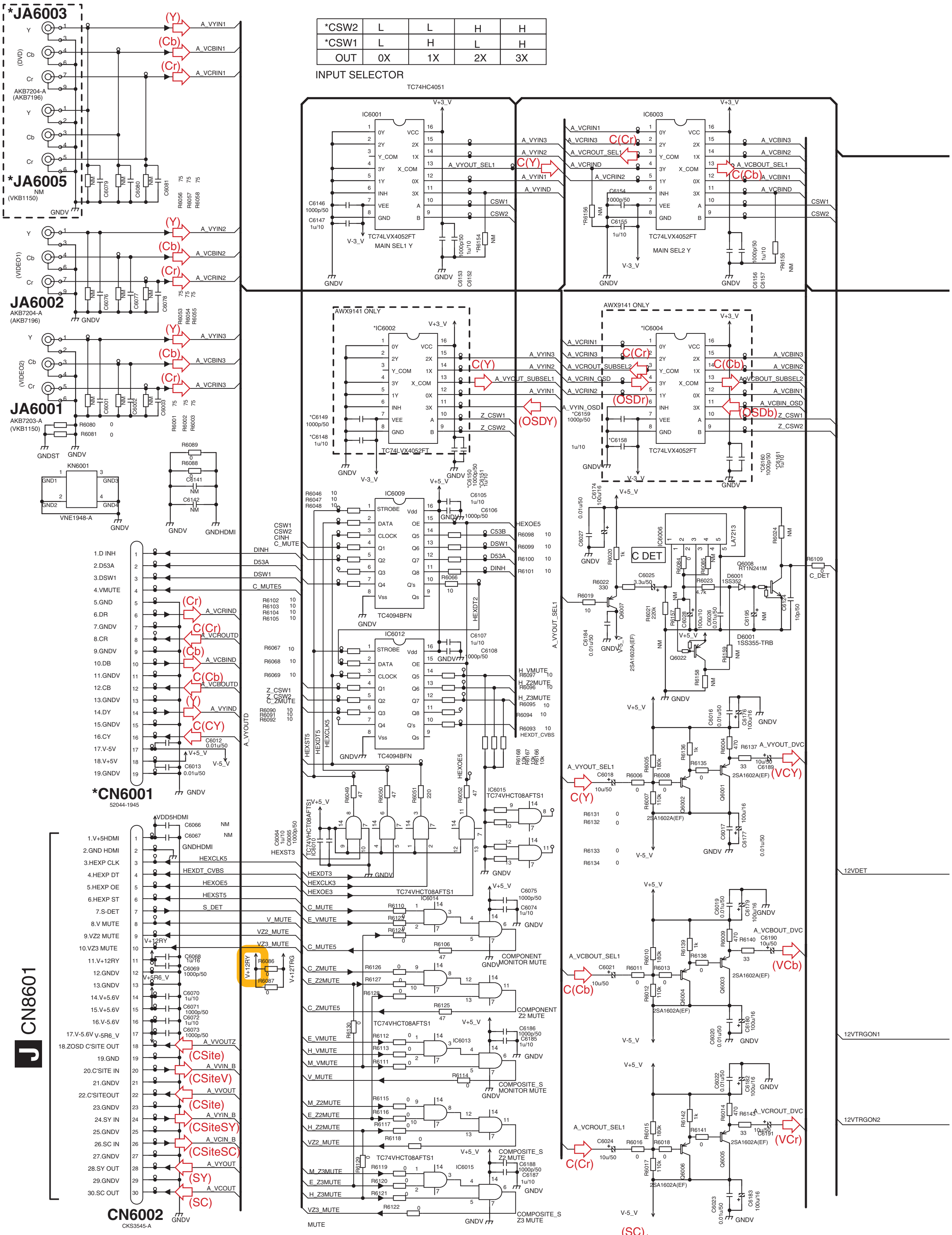
(SW) : Audio Signal Route (Subwoofer)

F

10.15 COMPONENT ASSY

*CSW2	L	L	H	H
*CSW1	L	H	L	H
OUT	0X	1X	2X	3X

INPUT SELECTOR


*JA6003
(DVD)
AKB7204-A
(AKB7196)
*JA6005
NM
(VKB1150)
JA6002
(VIDEO1)
AKB7204-A
(AKB7196)
JA6001
(VIDEO2)
AKB7203-A
(VKB1150)
KN6001
VNE1948-A
GNDST
GNDV
GNDHDMI
(Y)
(Cb)
(Cr)
A_VYIN1
A_VCBIN1
A_VCRIN1
A_VYIN2
A_VCBIN2
A_VCRIN2
A_VYIN3
A_VCBIN3
A_VCRIN3
TC74HC4051
IC6001
TC74LVX4052FT
MAIN SEL1 Y
IC6003
MAIN SEL2 Y
A_VYOUT_SEL1
A_VCBOUT_SEL1
A_VCROUT_SEL1
C(Y)
C(Cb)
C(Cr)
CSW1
CSW2
V+3_V
V-3_V
AWX9141 ONLY
*IC6002
*IC6004
A_VYOUT_SUBSEL1
A_VCROUT_SUBSEL2
A_VCBOUT_SUBSEL2
A_VCBIN_OSD
A_VCRIN_OSD
A_VYIN_OSD
(OSDY)
(OSDr)
(OSDb)
Z_CSW1
Z_CSW2
IC6009
TC4094BFN
IC6012
STROBE
DATA
CLOCK
HEXOE5
HEXDT2
HEXST5
HEXCLK5
C DET
LA7213
Q6008
RT1N241M
D6001
1SS352
1SS355-TRB
2SA1602A(EF)
A_VYOUT_DVC
A_VCBOUT_DVC
A_VCROUT_DVC
(VCY)
(VCb)
(VCr)
IC6015
TC74VHCT08AFTS1
IC6014
IC6013
COMPONENT MONITOR MUTE
COMPONENT Z2 MUTE
COMPOSITE_S MONITOR MUTE
COMPOSITE_S Z2 MUTE
COMPOSITE_S Z3 MUTE
12VDET
12VTRGON1
12VTRGON2
1.D INH
2.D53A
3.DSW1
4.VMUTE
5.GND
6.DR
7.GNDV
8.CR
9.GNDV
10.DB
11.GNDV
12.CB
13.GNDV
14.DY
15.GNDV
16.CY
17.V-5V
18.V+5V
19.GNDV
*CN6001
52044-1945
1.V+5HDMI
2.GND HDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.V MUTE
9.VZ2 MUTE
10.VZ3 MUTE
11.V+12RY
12.GNDV
13.GNDV
14.V+5.6V
15.V+5.6V
16.V-5.6V
17.V-5.6V
18.ZOSD C'SITE OUT
19.GND
20.C'SITE IN
21.GNDV
22.C'SITEOUT
23.GNDV
24.SY IN
25.GNDV
26.SC IN
27.GNDV
28.SY OUT
29.GNDV
30.SC OUT
CN6002
CKS3545-A
J CN8601
(CSite)
(CSiteV)
(CSiteSY)
(CSiteSC)
(SY)
(SC)
A_VVOUTZ
A_VVIN_B
A_VVOUT
A_VYIN_B
A_VCIN_B
A_VYOUT
A_VCOUT
V+12RY
V+12TRG
A_VYOUTD

(SC) : S-Video Signal Route (C)

(SY) : S-Video Signal Route (Y)

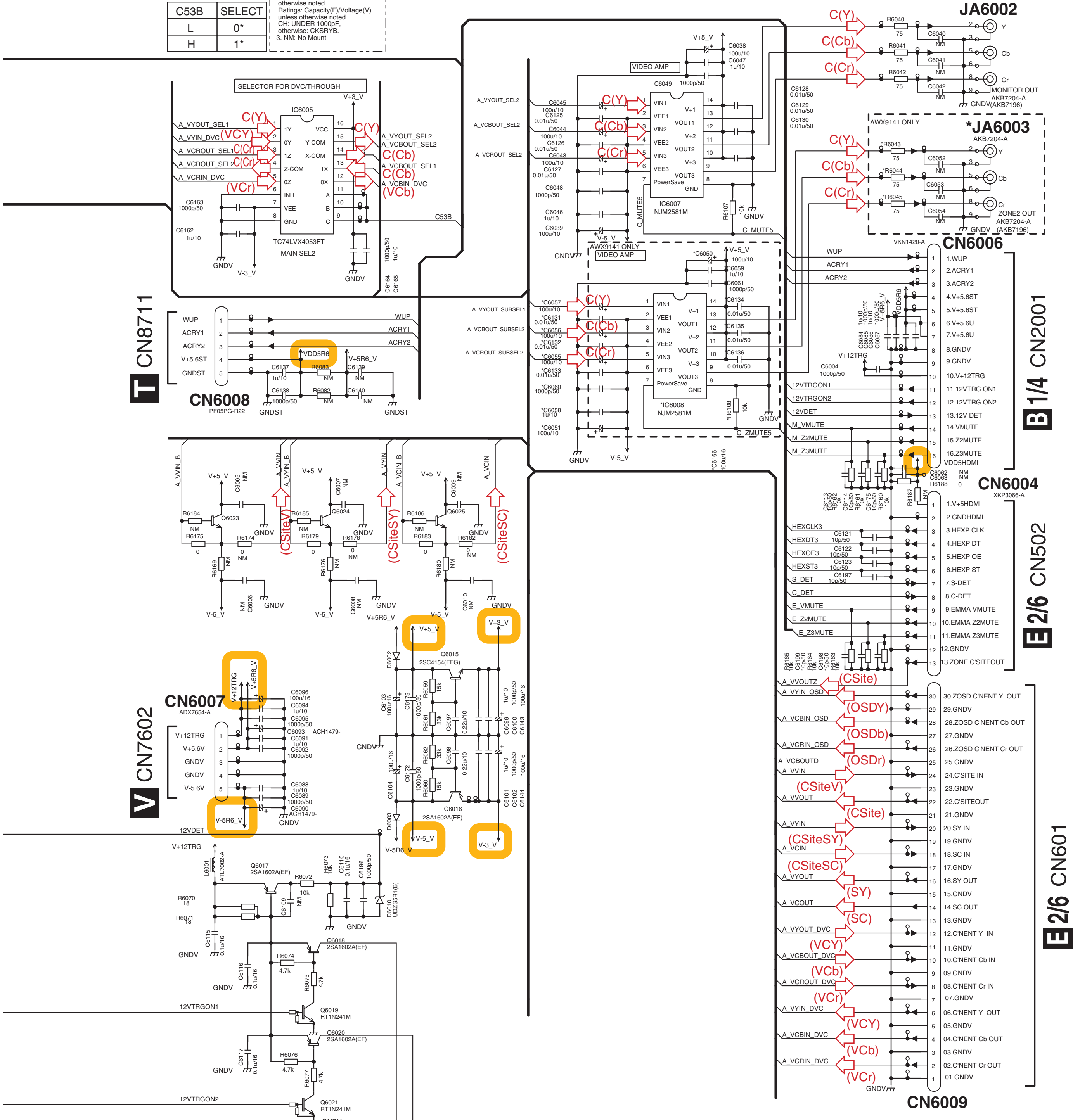
(CSiteSC) : Video Signal Route (Composite C)

G COMPONENT ASSY
(SC-LX81 : AWX9141)
(SC-LX71 : AWX9211)

NOTE

1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Tolerance: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH: UNDER 1000pF,
otherwise: CKSRYB.
3. NM: No Mount

C53B	SELECT
L	0*
H	1*



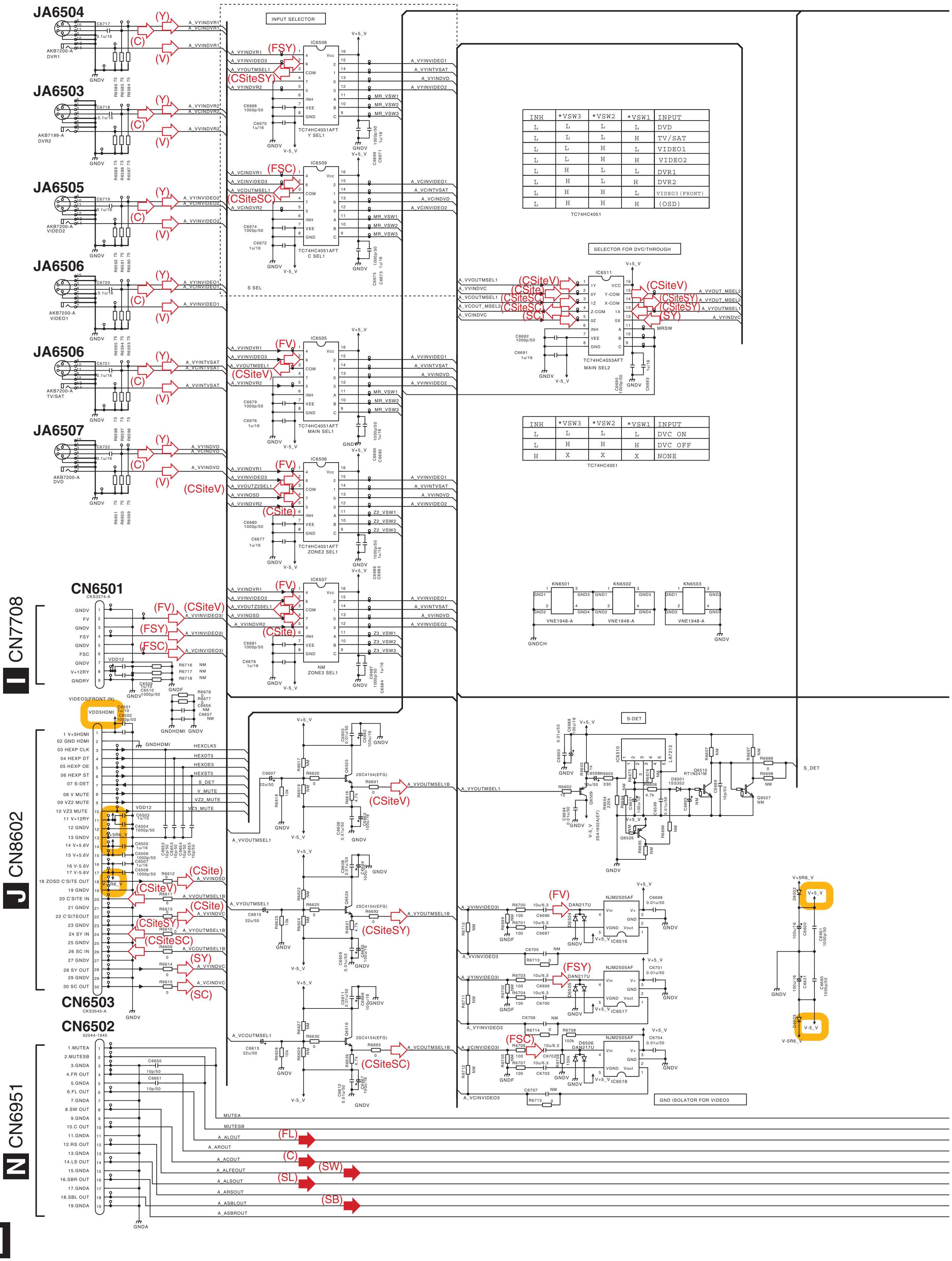
JA6002
Y
Cb
Cr
MONITOR OUT
AKB7204-A
GNDV (AKB7196)
R6040 75
R6041 75
R6042 75
C6040 NM
C6041 NM
C6042 NM
*JA6003
AKB7204-A
AWX9141 ONLY
ZONE2 OUT
AKB7204-A
GNDV (AKB7196)
*R6043 75
*R6044 75
*R6045 75
C6052 NM
C6053 NM
C6054 NM
VKN1420-A
CN6006
1.WUP
2.ACRY1
3.ACRY2
4.V+5.6ST
5.V+5.6ST
6.V+5.6U
7.V+5.6U
8.GNDV
9.GNDV
10.V+12TRG
11.12VTRG ON1
12.12VTRG ON2
13.12V DET
14.VMUTE
15.Z2MUTE
16.Z3MUTE
B 1/4 CN2001
VIDEO AMP
IC6007 NJM2581M
*IC6008 NJM2581M
AWX9141 ONLY
VIN1 VEE1 VIN2 VEE2 VIN3 VEE3 PowerSave V+1 VOUT1 V+2 VOUT2 V+3 VOUT3 GND
C_MUTE5
C_ZMUTE5
SELECTOR FOR DVC/THROUGH
IC6005
TC74LVX4053FT
MAIN SEL2
1Y 0Y 1Z 0Z Z-COM INH VEE GND VCC Y-COM X-COM 1X 0X A B C
A_VYOUT_SEL1
A_VYIN_DVC
A_VCROUT_SEL1
A_VCROUT_SEL2
A_VCRIN_DVC
A_VYOUT_SEL2
A_VCBOUT_SEL2
A_VCBOUT_SEL1
A_VCBIN_DVC
A_VYOUT_SUBSEL1
A_VCBOUT_SUBSEL2
A_VCROUT_SUBSEL2
C53B
T CN8711
CN6008
PF05PG-R22
WUP
ACRY1
ACRY2
V+5.6ST
GNDST
VDD5R6
V+5R6_V
CN6004
XKP3066-A
VDD5HDMI
1.V+5HDMI
2.GNDHDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.C-DET
9.EMMA VMUTE
10.EMMA Z2MUTE
11.EMMA Z3MUTE
12.GNDV
13.ZONE C'SITEOUT
E 2/6 CN502
HEXCLK3
HEXDT3
HEXOE3
HEXST3
S_DET
C_DET
E_VMUTE
E_Z2MUTE
E_Z3MUTE
12VTRGON1
12VTRGON2
12VDET
M_VMUTE
M_Z2MUTE
M_Z3MUTE
A_VVIN_B
A_VYIN_B
A_VCIN_B
A_VVIN
A_VYIN
A_VCIN
Q6023
Q6024
Q6025
(CSiteV)
(CSiteSY)
(CSiteSC)
CN6007
ADX7654-A
V CN7602
V+12TRG
V+5.6V
GNDV
GNDV
V-5.6V
V+12TRG
V+5R6_V
V-5R6_V
ACH1479-
V+5_V
V+3_V
V-5_V
V-3_V
Q6015 2SC4154(EFG)
Q6016 2SA1602A(EF)
D6002
D6003
12VDET
L6001 ATL7002-A
Q6017 2SA1602A(EF)
D6010 UDZS5R1(B)
Q6018 2SA1602A(EF)
Q6019 RT1N241M
Q6020 2SA1602A(EF)
Q6021 RT1N241M
12VTRGON1
12VTRGON2
12VTRG1
12VTRG2
JA6004
AKN-209-A
CN6009
E 2/6 CN601
30.ZOSD C'NENT Y OUT
29.GNDV
28.ZOSD C'NENT Cb OUT
27.GNDV
26.ZOSD C'NENT Cr OUT
25.GNDV
24.C'SITE IN
23.GNDV
22.C'SITEOUT
21.GNDV
20.SY IN
19.GNDV
18.SC IN
17.GNDV
16.SY OUT
15.GNDV
14.SC OUT
13.GNDV
12.C'NENT Y IN
11.GNDV
10.C'NENT Cb IN
09.GNDV
08.C'NENT Cr IN
07.GNDV
06.C'NENT Y OUT
05.GNDV
04.C'NENT Cb OUT
03.GNDV
02.C'NENT Cr OUT
01.GNDV
A_VVOUTZ
A_VYIN_OSD
A_VCBIN_OSD
A_VCRIN_OSD
A_VCBOUTD
A_VVIN
A_VVOUT
A_VYIN
A_VCIN
A_VYOUT
A_VCOUT
A_VYOUT_DVC
A_VCBOUT_DVC
A_VCROUT_DVC
A_VYIN_DVC
A_VCBIN_DVC
A_VCRIN_DVC
(CSite)
(OSDY)
(OSDb)
(OSDr)
(SY)
(SC)
(VCY)
(VCb)
(VCr)
C(Y)
C(Cb)
C(Cr)

(Y): Video Signal Route (Y)
(Cb): Video Signal Route (Cb)
(Cr): Video Signal Route (Cr)
C(Y): Video Signal Route (Component Y)
C(Cb): Video Signal Route (Component Cb)
C(Cr): Video Signal Route (Component Cr)

(VCY): Video Signal Route (VCY)
(VCb): Video Signal Route (VCb)
(VCr): Video Signal Route (VCr)
(OSDY): Video Signal Route (OSDY)
(OSDb): Video Signal Route (OSDb)
(OSDr): Video Signal Route (OSDr)

(CSiteSY): Video Signal Route (Composite Y)
(CSiteV): Video Signal Route (Composite Video)
(CSite): Video Signal Route (Composite)

10.16 COMPOSITE S ASSY


JA6504
AKB7200-A
DVR1
JA6503
AKB7199-A
DVR2
JA6505
AKB7200-A
VIDEO2
JA6506
AKB7200-A
VIDEO1
JA6506
AKB7200-A
TV/SAT
JA6507
AKB7200-A
DVD
(Y)
(C)
(V)
(CSiteV)
INPUT SELECTOR
S SEL
IC6508
TC74HC4051AFT
Y SEL1
IC6509
TC74HC4051AFT
C SEL1
IC6505
TC74HC4051AFT
MAIN SEL1
IC6506
TC74HC4051AFT
ZONE2 SEL1
IC6507
ZONE3 SEL1
(FSY)
(CSiteSY)
(FSC)
(CSiteSC)
(FV)
(CSite)
SELECTOR FOR DVC/THROUGH
IC6511
TC74HC4053AFT
MAIN SEL2
(SiteSC)
(SC)
(SY)
MRSW
KN6501
KN6502
KN6503
VNE1948-A
GNDCH
CN6501
CKS3374-A
CN7708
I
VIDEO3(FRONT IN)
VDD5HDMI
CN8602
J
CN6503
CKS3545-A
CN6502
52044-1945
CN6951
N
S-DET
S_DET
IC6510
LA7213
2SC4154(EFG)
A_VVOUTMSEL1B
A_VYOUTMSEL1B
A_VCOUTMSEL1B
NJM2505AF
DAN217U
IC6516
IC6517
IC6518
GND ISOLATOR FOR VIDEO3
V+5R6_V
V+5_V
V-5_V
V-5R6_V
MUTEA
MUTESB
A_ALOUT
A_AROUT
A_ACOUT
A_ALFEOUT
A_ALSOUT
A_ARSOUT
A_ASBLOUT
A_ASBROUT
(FL)
(C)
(SW)
(SL)
(SB)
GNDA

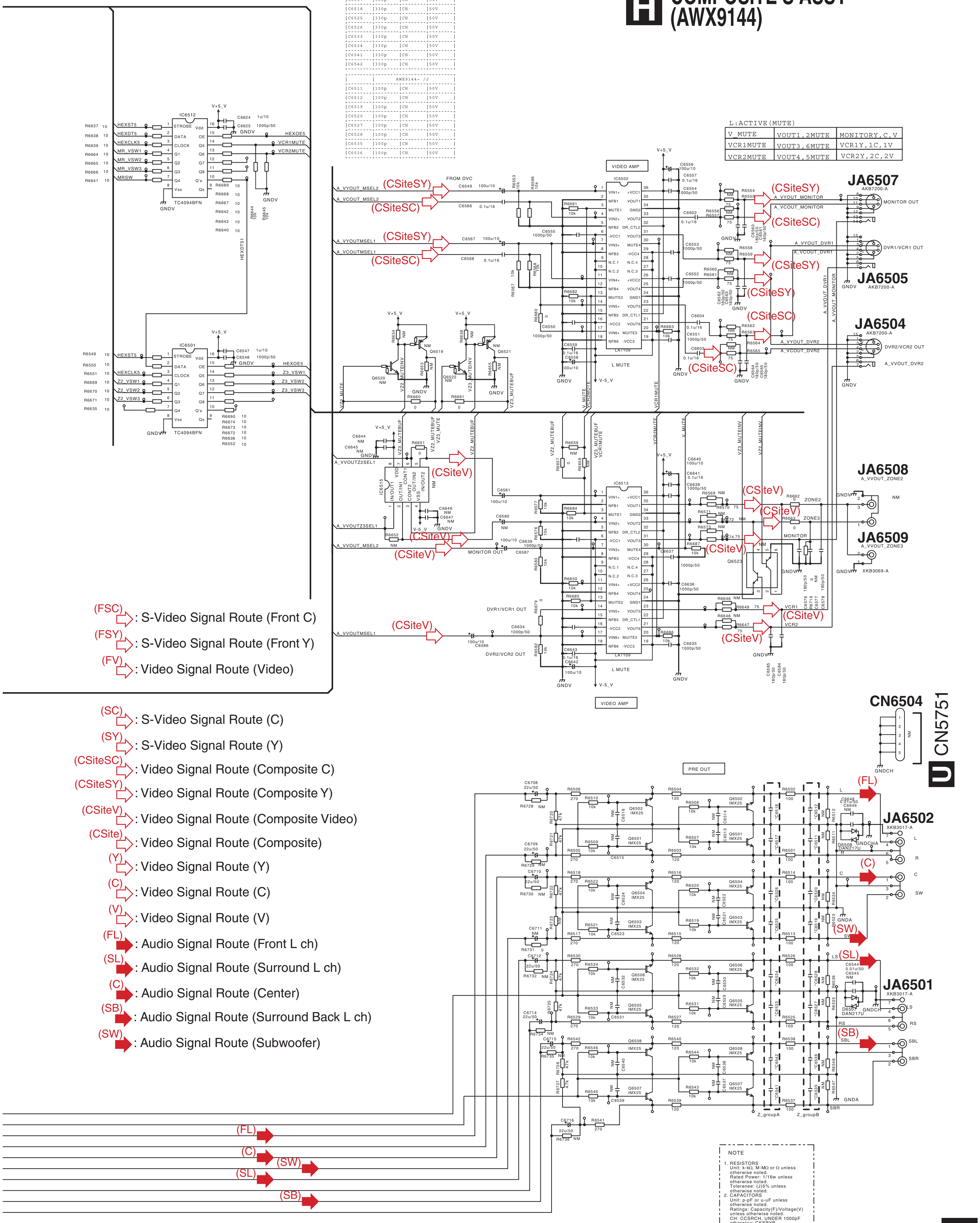
INH	*VSW3	*VSW2	*VSW1	INPUT
L	L	L	L	DVD
L	L	L	H	TV/SAT
L	L	H	L	VIDEO1
L	L	H	H	VIDEO2
L	H	L	L	DVR1
L	H	L	H	DVR2
L	H	H	L	VIDEO3(FRONT)
L	H	H	H	(OSD)

TC74HC4051

INH	*VSW3	*VSW2	*VSW1	INPUT
L	L	L	L	DVC ON
L	H	H	H	DVC OFF
H	X	X	X	NONE

TC74HC4051

H COMPOSITE S ASSY (AWX9144)


IC6512
TC4094BFN
IC6501
TC4094BFN
IC6502
IC6513
LA7109
VIDEO AMP
IC6515
FROM DVC
MONITOR OUT
DVR1/VCR1 OUT
DVR2/VCR2 OUT
L MUTE
JA6507
AKB7200-A
JA6505
AKB7200-A
JA6504
AKB7200-A
JA6508
A_VVOUT_ZONE2
JA6509
A_VVOUT_ZONE3
XKB3069-A
CN6504
CN5751
PRE OUT
JA6502
XKB3017-A
JA6501
XKB3017-A
Z_groupA
Z_groupB
(CSiteSY)
(CSiteSC)
(CSiteV)
(FL)
(C)
(SW)
(SL)
(SB)
A_VYOUT_MSEL2
A_VCOUT_MSEL2
A_VYOUTMSEL1
A_VCOUTMSEL1
A_VVOUTZ2SEL1
A_VVOUTZ3SEL1
A_VVOUT_MSEL2
A_VVOUTMSEL1
A_VYOUT_MONITOR
A_VCOUT_MONITOR
A_VYOUT_DVR1
A_VCOUT_DVR1
A_VYOUT_DVR2
A_VCOUT_DVR2
A_VVOUT_DVR2
ZONE2
ZONE3
MONITOR
VCR1
VCR2
V+5_V
V-5_V
GNDV
GNDA

L:ACTIVE(MUTE)

V_MUTE	VOUT1,2MUTE	MONITORY,C,V
VCR1MUTE	VOUT3,6MUTE	VCR1Y,1C,1V
VCR2MUTE	VOUT4,5MUTE	VCR2Y,2C,2V

	AWX9144- /J		
C6517	330p	CH	50V
C6518	330p	CH	50V
C6525	330p	CH	50V
C6526	330p	CH	50V
C6533	330p	CH	50V
C6534	330p	CH	50V
C6541	330p	CH	50V
C6542	330p	CH	50V

	AWX9144- /J		
C6511	100p	CH	50V
C6512	100p	CH	50V
C6519	100p	CH	50V
C6520	100p	CH	50V
C6527	100p	CH	50V
C6528	100p	CH	50V
C6535	100p	CH	50V
C6536	100p	CH	50V

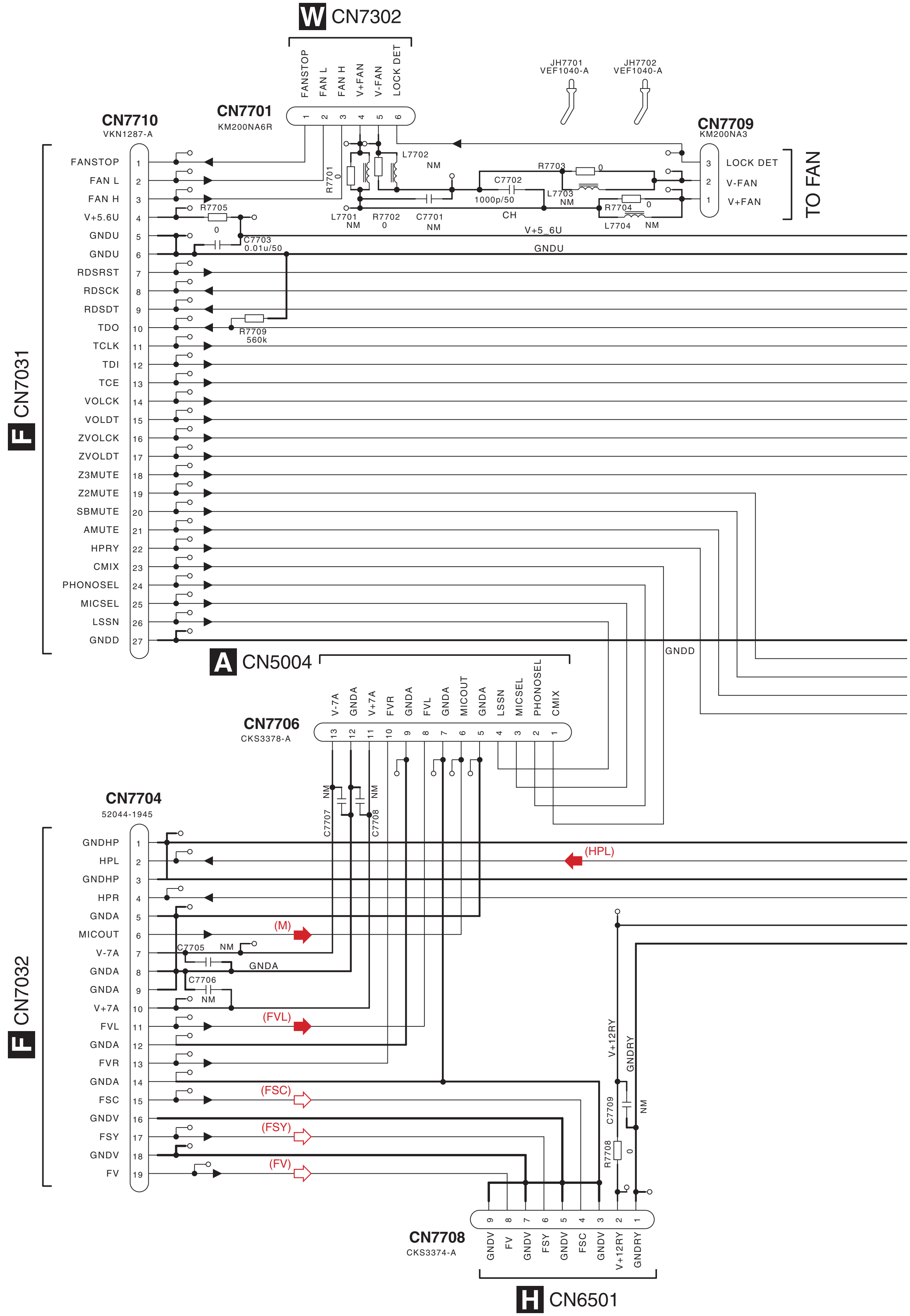
(FSC) ⇨ : S-Video Signal Route (Front C)
(FSY) ⇨ : S-Video Signal Route (Front Y)
(FV) ⇨ : Video Signal Route (Video)

(SC) ⇨ : S-Video Signal Route (C)
(SY) ⇨ : S-Video Signal Route (Y)
(CSiteSC) ⇨ : Video Signal Route (Composite C)
(CSiteSY) ⇨ : Video Signal Route (Composite Y)
(CSiteV) ⇨ : Video Signal Route (Composite Video)
(CSite) ⇨ : Video Signal Route (Composite)
(Y) ⇨ : Video Signal Route (Y)
(C) ⇨ : Video Signal Route (C)
(V) ⇨ : Video Signal Route (V)
(FL) ➡ : Audio Signal Route (Front L ch)
(SL) ➡ : Audio Signal Route (Surround L ch)
(C) ➡ : Audio Signal Route (Center)
(SB) ➡ : Audio Signal Route (Surround Back L ch)
(SW) ➡ : Audio Signal Route (Subwoofer)

NOTE

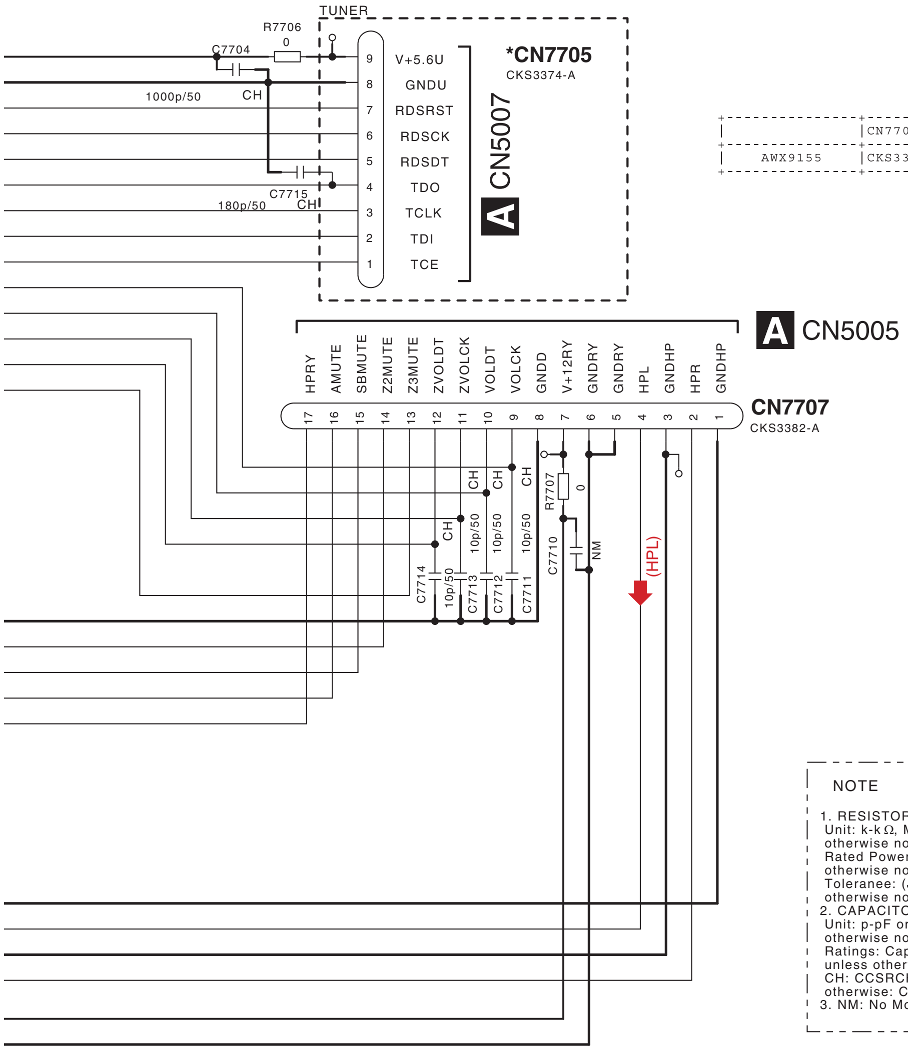
1. RESISTORS
   Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
   Rated Power: 1/16w unless otherwise noted.
   Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
   Unit: p-pF or u-uF unless otherwise noted.
   Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
   CH: CCSRCH, UNDER 1000pF otherwise: CKSRYB.
3. NM: No Mount

10.17 FRONT BRIDGE ASSY



W CN7302
FANSTOP
FAN L
FAN H
V+FAN
V-FAN
LOCK DET
CN7701
KM200NA6R
JH7701
VEF1040-A
JH7702
VEF1040-A
CN7709
KM200NA3
LOCK DET
V-FAN
V+FAN
TO FAN
CN7710
VKN1287-A
F CN7031
FANSTOP
FAN L
FAN H
V+5.6U
GNDU
GNDU
RDSRST
RDSCK
RDSDT
TDO
TCLK
TDI
TCE
VOLCK
VOLDT
ZVOLCK
ZVOLDT
Z3MUTE
Z2MUTE
SBMUTE
AMUTE
HPRY
CMIX
PHONOSEL
MICSEL
LSSN
GNDD
R7701
0
L7702
NM
L7701
NM
R7702
0
C7701
NM
C7702
1000p/50
CH
R7703
0
L7703
NM
R7704
0
L7704
NM
R7705
0
C7703
0.01u/50
V+5_6U
GNDU
R7709
560k
GNDD
A CN5004
V-7A
GNDA
V+7A
FVR
GNDA
FVL
GNDA
MICOUT
GNDA
LSSN
MICSEL
PHONOSEL
CMIX
CN7706
CKS3378-A
C7707
NM
C7708
NM
CN7704
52044-1945
F CN7032
GNDHP
HPL
GNDHP
HPR
GNDA
MICOUT
V-7A
GNDA
GNDA
V+7A
FVL
GNDA
FVR
GNDA
FSC
GNDV
FSY
GNDV
FV
(HPL)
(M)
C7705
NM
GNDA
C7706
NM
(FVL)
(FSC)
(FSY)
(FV)
V+12RY
GNDRY
C7709
NM
R7708
0
CN7708
CKS3374-A
GNDV
FV
GNDV
FSY
GNDV
FSC
GNDV
V+12RY
GNDRY
H CN6501

I FRONT BRIDGE ASSY (AWX9155)


TUNER
R7706
0
C7704
1000p/50
CH
C7715
180p/50
CH
9 V+5.6U
8 GNDU
7 RDSRST
6 RDSCK
5 RDSDT
4 TDO
3 TCLK
2 TDI
1 TCE
*CN7705
CKS3374-A
A CN5007
A CN5005
HPRY
AMUTE
SBMUTE
Z2MUTE
Z3MUTE
ZVOLDT
ZVOLCK
VOLDT
VOLCK
GNDD
V+12RY
GNDRY
GNDRY
HPL
GNDHP
HPR
GNDHP
17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
CN7707
CKS3382-A
CH
CH
CH
CH
10p/50
10p/50
10p/50
10p/50
C7714
C7713
C7712
C7711
R7707
0
C7710
NM
(HPL)

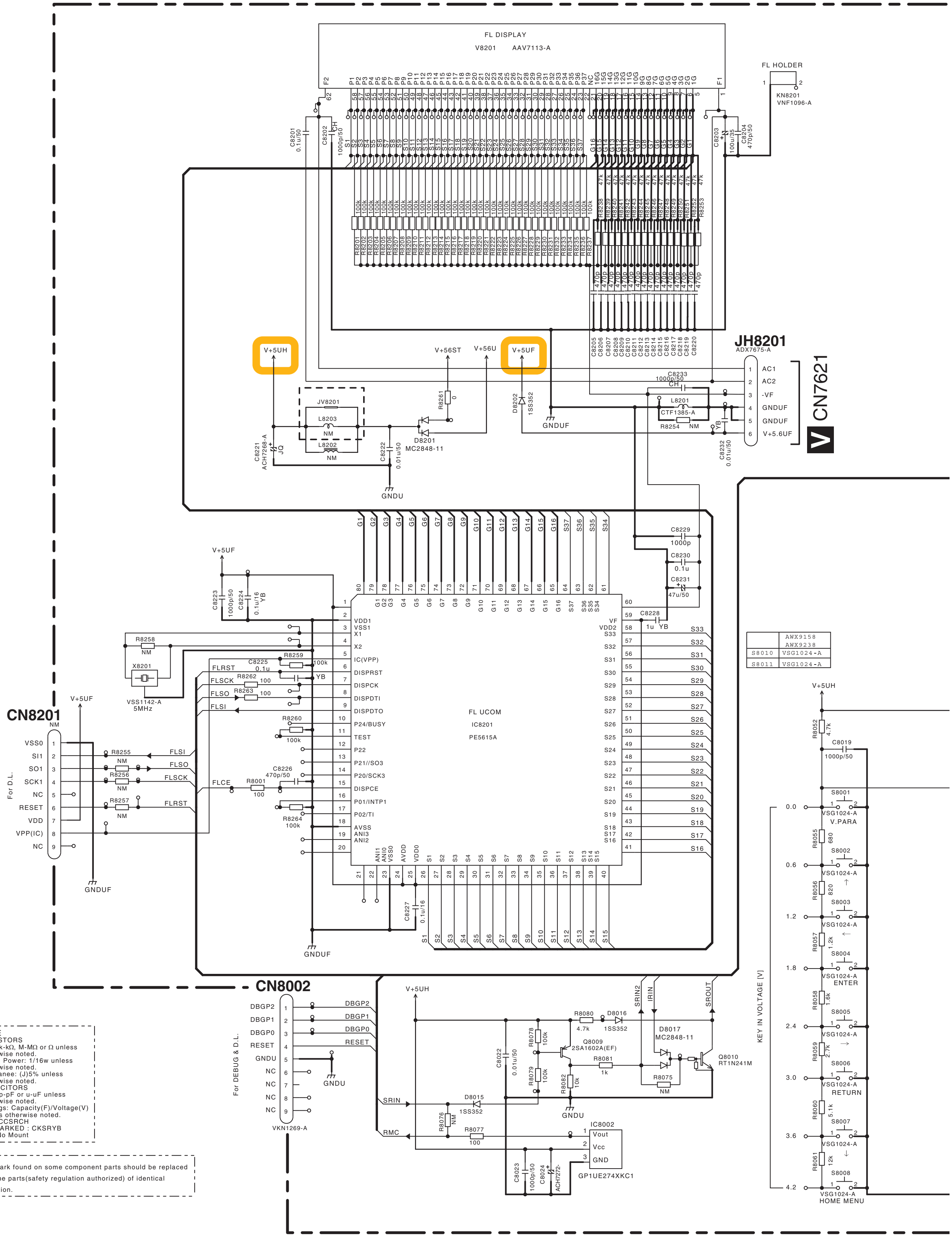
	CN7705
AWX9155	CKS3374-A

NOTE

1. RESISTORS
   Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
   Rated Power: 1/16w unless otherwise noted.
   Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
   Unit: p-pF or u-uF unless otherwise noted.
   Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
   CH: CCSRCH,
   otherwise: CKSRYB.
3. NM: No Mount

(FSC) ⇨ : S-Video Signal Route (Front C)
(FSY) ⇨ : S-Video Signal Route (Front Y)
(FV) ⇨ : Video Signal Route (Video)
(FVL) ➡ : Audio Signal Route (Video L ch)
(M) ➡ : Audio Signal Route (Mic)
(HPL) ➡ : Audio Signal Route (Headphone L ch)

10.18 DISPLAY, VOL and POWER SW ASSYS

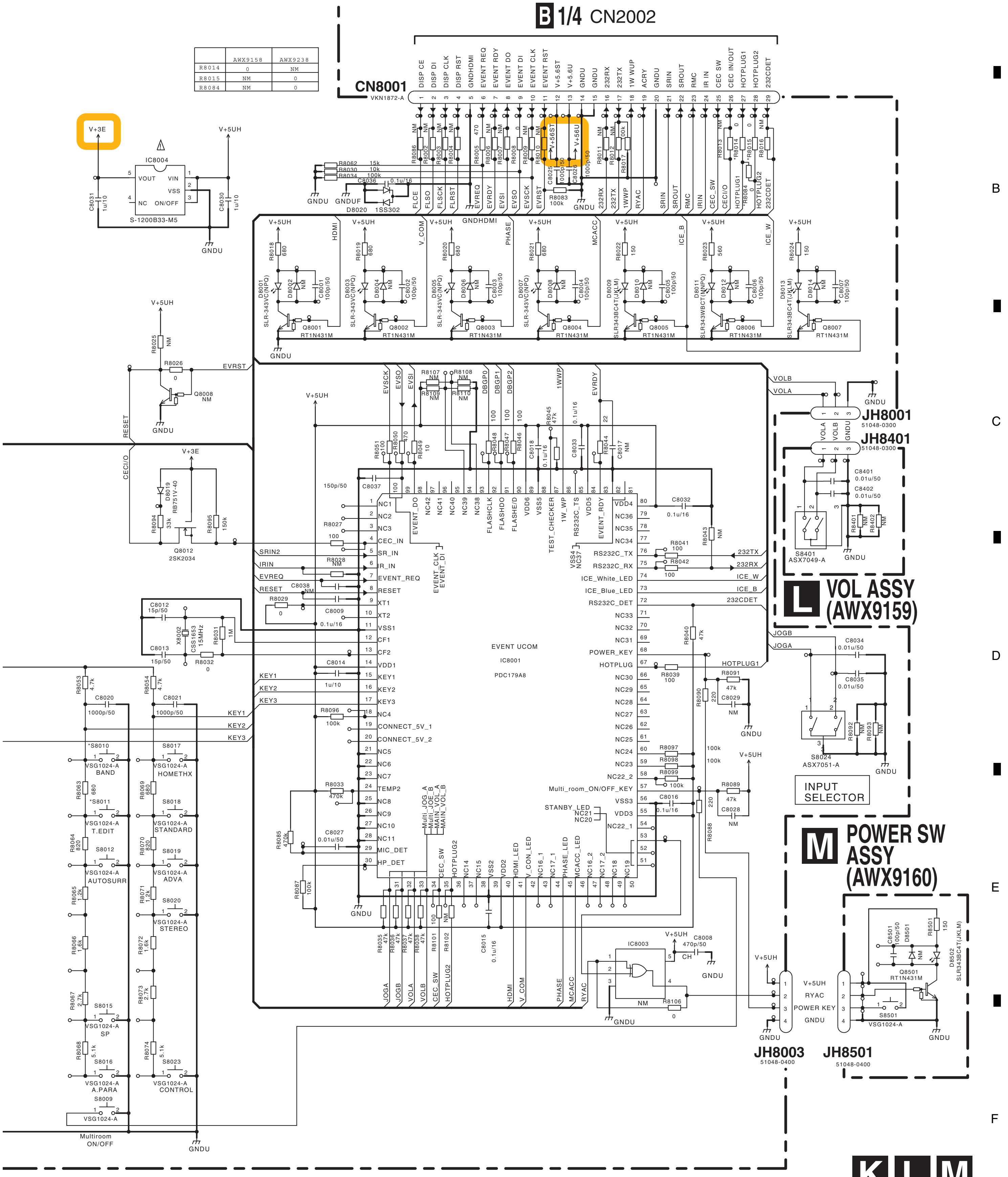

FL DISPLAY
V8201 AAV7113-A
FL HOLDER
KN8201
VNF1096-A
C8201 0.1u/50
C8202 1000p/50 CH
C8203 100u/35
C8204 470p/50
R8201–R8237 100k
R8238–R8253 47k
470p
C8205–C8220
JH8201
ADX7675-A
AC1
AC2
-VF
GNDUF
GNDUF
V+5.6UF
V CN7621
C8233 1000p/50 CH
L8201 CTF1385-A
R8254 NM
YB
C8232 0.01u/50
V+5UH
V+56ST
V+56U
V+5UF
R8261 0
D8202 1SS352
GNDUF
JV8201
L8203 NM
L8202 NM
D8201 MC2848-11
C8221 ACH7268-A JQ
C8222 0.01u/50
GNDU
FL UCOM
IC8201
PE5615A
C8229 1000p
C8230 0.1u
C8231 47u/50
C8228 1u YB
V+5UF
C8223 1000p/50
C8224 0.1u/16 YB
R8258 NM
X8201 VSS1142-A 5MHz
R8259 100k
C8225 0.1u YB
R8262 100
R8263 100
FLRST
FLSCK
FLSO
FLSI
R8260 100k
C8226 470p/50
R8001 100
FLCE
R8264 100k
C8227 0.1u/16
GNDUF
VDD1 VSS1 X1 X2 IC(VPP) DISPRST DISPCK DISPDTI DISPDTO P24/BUSY TEST P22 P21//SO3 P20/SCK3 DISPCE P01/INTP1 P02/TI AVSS ANI3 ANI2
ANI1 ANI0 VSS0 AVDD VDD0
VF VDD2
CN8201
NM
For D.L.
VSS0 SI1 SO1 SCK1 NC RESET VDD VPP(IC) NC
R8255 NM
R8256 NM
R8257 NM
FLSI FLSO FLSCK FLRST
V+5UF
GNDUF
AWX9158
AWX9238
S8010 VSG1024-A
S8011 VSG1024-A
V+5UH
R8052 4.7k
C8019 1000p/50
KEY IN VOLTAGE [V]
0.0 S8001 VSG1024-A V.PARA
R8055 680
0.6 S8002 VSG1024-A ↑
R8056 820
1.2 S8003 VSG1024-A ←
R8057 1.2k
1.8 S8004 VSG1024-A ENTER
R8058 1.8k
2.4 S8005 VSG1024-A →
R8059 2.7k
3.0 S8006 VSG1024-A RETURN
R8060 5.1k
3.6 S8007 VSG1024-A ↓
R8061 12k
4.2 S8008 VSG1024-A HOME MENU
CN8002
For DEBUG & D.L.
DBGP2 DBGP1 DBGP0 RESET GNDU NC NC NC NC
VKN1269-A
GNDU
V+5UH
SRIN2
IRIN
SROUT
R8080 4.7k
D8016 1SS352
D8017 MC2848-11
R8078 100k
Q8009 2SA1602A(EF)
R8081 1k
Q8010 RT1N241M
R8079 100k
R8082 10k
R8075 NM
C8022 0.01u/50
GNDU
SRIN
D8015 1SS352
RMC
R8076 NM
R8077 100
IC8002
Vout Vcc GND
GP1UE274XKC1
C8023 1000p/50
C8024 ACH7272-

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH
NO MARKED : CKSRYB
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

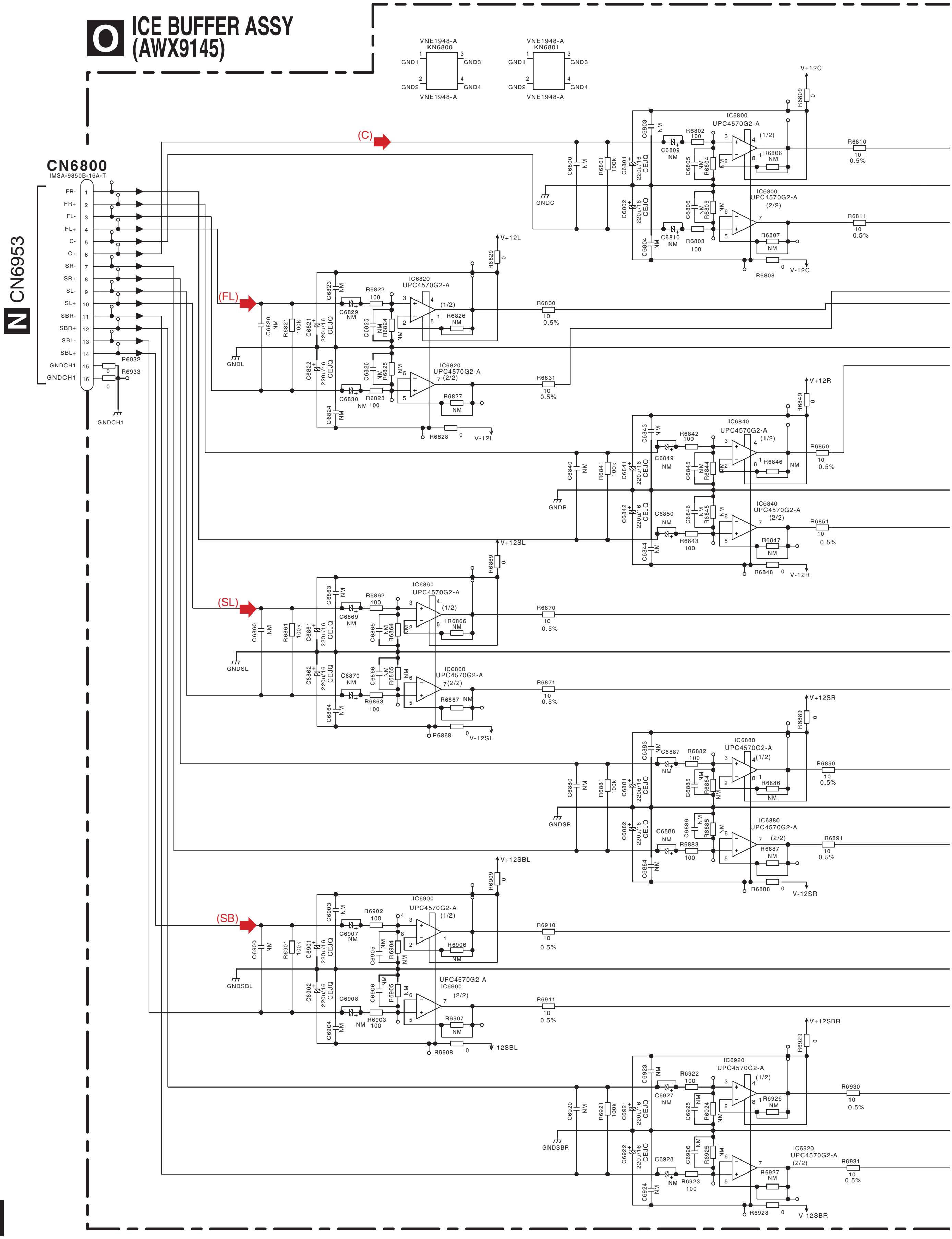
K DISPLAY ASSY
(SC-LX81 : AWX9158)
(SC-LX71 : AWX9238)

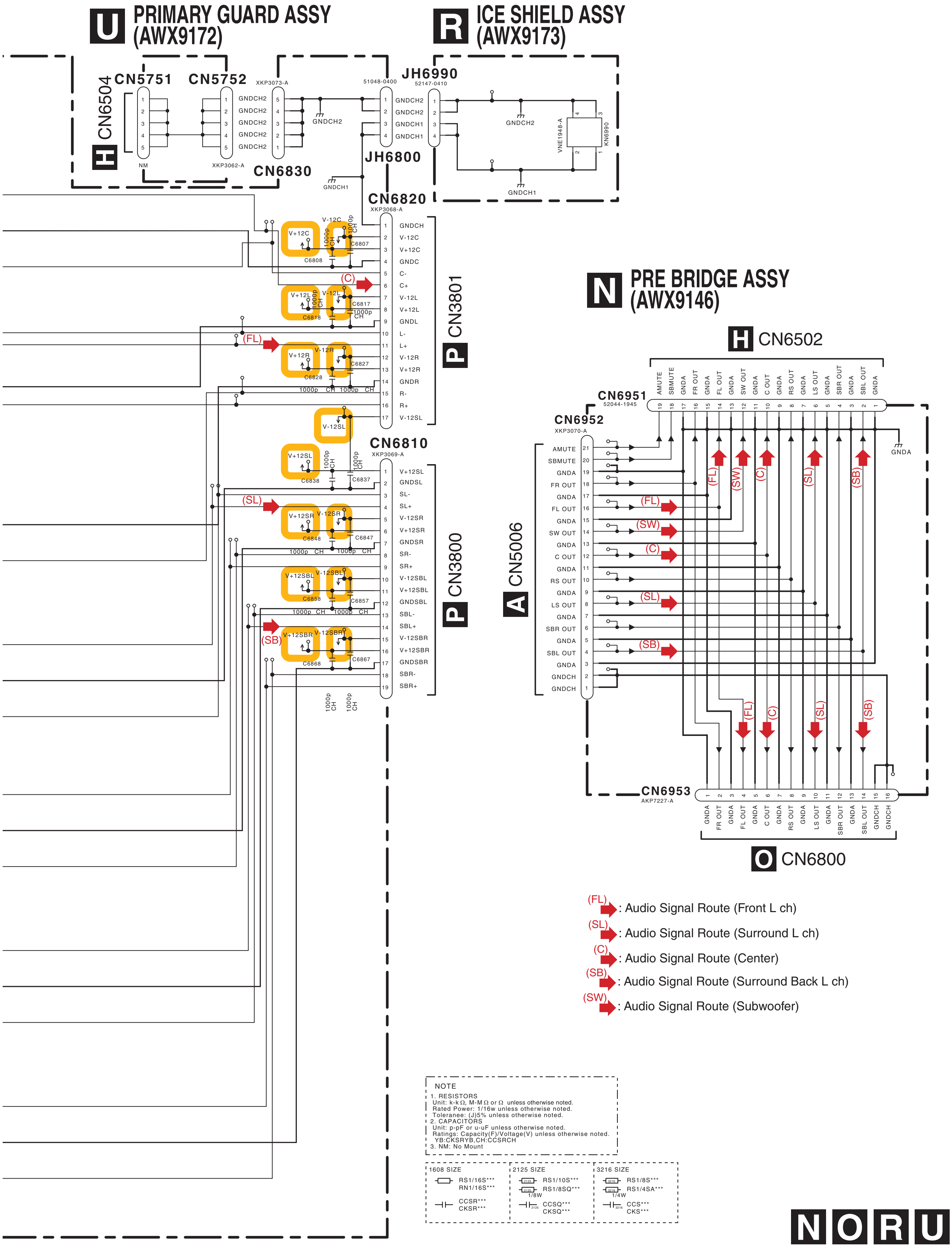
	AWX9158	AWX9238
R8014	0	NM
R8015	NM	0
R8084	NM	0



B 1/4 CN2002
CN8001
VKN1872-A
DISP CE
DISP DI
DISP CLK
DISP RST
GNDHDMI
EVENT REQ
EVENT RDY
EVENT DO
EVENT DI
EVENT CLK
EVENT RST
V+5.6ST
V+5.6U
GNDU
232RX
232TX
1W WUP
ACRY
SRIN
SROUT
RMC
IR IN
CEC SW
CEC IN/OUT
HOTPLUG1
HOTPLUG2
232CDET
V+3E
V+5UH
IC8004
S-1200B33-M5
VOUT
VIN
VSS
NC
ON/OFF
C8031
1u/10
C8030
1u/10
GNDU
R8062 15k
R8030 10k
R8034 100k
C8036 0.1u/16
D8020 1SS302
GNDUF
V+56ST
V+56U
C8025
C8026
R8083 100k
1000p/50
FLCE
FLSO
FLSCK
FLRST
EVREQ
EVRDY
EVSI
EVSO
EVSCK
EVRST
1WWP
RYAC
R8086
R8002
R8003
R8004
R8005
R8006
R8007
R8008
R8009
R8010
R8011
R8012
R8017
R8013
R8014
R8015
R8084
R8016
HDMI
V_COM
GNDHDMI
PHASE
MCACC
ICE_B
ICE_W
R8018 680
R8019 680
R8020 680
R8021 680
R8022 150
R8023 560
R8024 150
D8001 SLR-343VC(NPQ)
D8003 SLR-343VC(NPQ)
D8005 SLR-343VC(NPQ)
D8007 SLR-343VC(NPQ)
D8009 SLR343BC4T(JKLM)
D8011 SLR343WBCT(NPQ)
D8013 SLR343BC4T(JKLM)
D8002 NM
D8004 NM
D8006 NM
D8008 NM
D8010 NM
D8012 NM
D8014 NM
C8001 100p/50
C8002 100p/50
C8003 100p/50
C8004 100p/50
C8005 100p/50
C8006 100p/50
C8007 100p/50
Q8001 RT1N431M
Q8002 RT1N431M
Q8003 RT1N431M
Q8004 RT1N431M
Q8005 RT1N431M
Q8006 RT1N431M
Q8007 RT1N431M
R8025 NM
R8026 0
Q8008 NM
EVRST
RESET
CEC I/O
D8019 RB751V-40
R8094 33k
R8095 150k
Q8012 2SK2034
R8107 NM
R8108 NM
R8109 NM
R8110 NM
DBGP0
DBGP1
DBGP2
R8051 100
R8050 470
R8049 10
R8048 100
R8047 100
R8046 100
R8045 47k
C8018 0.1u/16
C8033 0.1u/16
R8044 22
C8017 NM
C8037 150p/50
C8032 0.1u/16
R8043 NM
R8041 100
R8042 100
232TX
232RX
ICE_W
ICE_B
232CDET
R8040 47k
HOTPLUG1
R8039 100
R8091 47k
R8090 220
C8029 NM
R8097 100k
R8098 100k
R8099 100k
R8089 47k
R8088 220
C8016 0.1u/16
C8028 NM
R8027 100
R8028 NM
R8029 0
C8038 NM
C8009 0.1u/16
C8012 15p/50
X8002 CSS1653 15MHz
R8031 1M
C8013 15p/50
R8032 0
C8014 1u/10
R8096 100k
R8033 470k
C8027 0.01u/50
R8085 470k
R8087 100k
SRIN2
IRIN
EVREQ
RESET
KEY1
KEY2
KEY3
EVENT UCOM
IC8001
PDC179A8
NC1
NC2
NC3
CEC_IN
SR_IN
IR_IN
EVENT_REQ
RESET
XT1
XT2
VSS1
CF1
CF2
VDD1
KEY1
KEY2
KEY3
NC4
CONNECT_5V_1
CONNECT_5V_2
NC5
NC6
NC7
TEMP2
NC8
NC9
NC10
NC11
MIC_DET
HP_DET
EVENT_DO
NC42
NC41
NC40
NC39
NC38
FLASHCLK
FLASHDO
FLASHE/D
VDD6
VSS5
TEST_CHECKER
1W_WP
RS232C_TS
VDD5
EVENT_RDY
VDD4
NC36
NC35
NC34
RS232C_TX
RS232C_RX
ICE_White_LED
ICE_Blue_LED
RS232C_DET
NC33
NC32
NC31
POWER_KEY
HOTPLUG
NC30
NC29
NC28
NC27
NC26
NC25
NC24
NC23
NC22_2
Multi_room_ON/OFF_KEY
VSS3
VDD3
NC22_1
STANBY_LED
NC21
NC20
EVENT_CLK
EVENT_DI
VSS4
NC37
Multi_JOG_A
Multi_JOE_B
MAIN_VOL_A
MAIN_VOL_B
CEC_SW
HOTPLUG2
NC14
NC15
VSS2
VDD2
HDMI_LED
V_CON_LED
NC16_1
NC17_1
PHASE_LED
MCACC_LED
NC16_2
NC17_2
NC18
NC19
R8035 47k
R8036 47k
R8037 47k
R8038 47k
R8101 100
R8102 NM
C8015 0.1u/16
JOGA
JOGB
VOLA
VOLB
CEC_SW
HOTPLUG2
HDMI
V_COM
PHASE
MCACC
RYAC
IC8003
C8008 470p/50
R8106 0
NM
R8053 4.7k
R8054 4.7k
C8020 1000p/50
C8021 1000p/50
*S8010 VSG1024-A BAND
S8017 VSG1024-A HOMETHX
R8063 680
R8069 680
*S8011 VSG1024-A T.EDIT
S8018 VSG1024-A STANDARD
R8064 820
R8070 820
S8012 VSG1024-A AUTOSURR
S8019 VSG1024-A ADVA
R8065 1.2k
R8071 1.2k
S8020 VSG1024-A STEREO
R8066 1.6k
R8072 1.6k
R8067 2.7k
R8073 2.7k
S8015 VSG1024-A SP
R8068 5.1k
R8074 5.1k
S8016 VSG1024-A A.PARA
S8023 VSG1024-A CONTROL
S8009 VSG1024-A
Multiroom ON/OFF
VOLB
VOLA
JH8001 51048-0300
JH8401 51048-0300
C8401 0.01u/50
C8402 0.01u/50
R8401 NM
R8402 NM
S8401 ASX7049-A
L VOL ASSY (AWX9159)
JOGB
JOGA
C8034 0.01u/50
C8035 0.01u/50
R8092 NM
R8093 NM
S8024 ASX7051-A
INPUT SELECTOR
M POWER SW ASSY (AWX9160)
C8501 100p/50
D8501 NM
R8501 150
D8502 SLR343BC4T(JKLM)
Q8501 RT1N431M
V+5UH
RYAC
POWER KEY
GNDU
S8501 VSG1024-A
JH8003 51048-0400
JH8501 51048-0400
5
6
7
8
A
B
C
D
E
F

10.19 PRE BRIDGE, ICE BUFFER, ICE SHIELD and PRIMARY GUARD ASSYS


O
ICE BUFFER ASSY
(AWX9145)
N CN6953
CN6800
IMSA-9850B-16A-T
FR- 1
FR+ 2
FL- 3
FL+ 4
C- 5
C+ 6
SR- 7
SR+ 8
SL- 9
SL+ 10
SBR- 11
SBR+ 12
SBL- 13
SBL+ 14
GNDCH1 15
GNDCH1 16
R6932 0
R6933 0
GNDCH1
VNE1948-A KN6800
VNE1948-A KN6801
GND1 GND2 GND3 GND4
(C)
(FL)
(SL)
(SB)
IC6800 UPC4570G2-A (1/2)
IC6800 UPC4570G2-A (2/2)
IC6820 UPC4570G2-A (1/2)
IC6820 UPC4570G2-A (2/2)
IC6840 UPC4570G2-A (1/2)
IC6840 UPC4570G2-A (2/2)
IC6860 UPC4570G2-A (1/2)
IC6860 UPC4570G2-A (2/2)
IC6880 UPC4570G2-A (1/2)
IC6880 UPC4570G2-A (2/2)
IC6900 UPC4570G2-A (1/2)
IC6900 UPC4570G2-A (2/2)
IC6920 UPC4570G2-A (1/2)
IC6920 UPC4570G2-A (2/2)
V+12C V-12C V+12L V-12L V+12R V-12R V+12SL V-12SL V+12SR V-12SR V+12SBL V-12SBL V+12SBR V-12SBR
GNDC GNDL GNDR GNDSL GNDSR GNDSBL GNDSBR
R6810 10 0.5%
R6811 10 0.5%
R6830 10 0.5%
R6831 10 0.5%
R6850 10 0.5%
R6851 10 0.5%
R6870 10 0.5%
R6871 10 0.5%
R6890 10 0.5%
R6891 10 0.5%
R6910 10 0.5%
R6911 10 0.5%
R6930 10 0.5%
R6931 10 0.5%
R6802 100
R6803 100
C6800 NM
R6801 100k
C6801 220u/16 CEJQ
C6802 220u/16 CEJQ
R6809 0
R6808 0
C6820 NM
R6821 100k
C6821 220u/16 CEJQ
C6822 220u/16 CEJQ
R6822 100
R6823 100
R6829 0
R6828 0
C6840 NM
R6841 100k
R6842 100
R6843 100
R6849 0
R6848 0
C6860 NM
R6861 100k
R6862 100
R6863 100
R6869 0
R6868 0
C6880 NM
R6881 100k
R6882 100
R6883 100
R6889 0
R6888 0
C6900 NM
R6901 100k
R6902 100
R6903 100
R6909 0
R6908 0
C6920 NM
R6921 100k
R6922 100
R6923 100
R6929 0
R6928 0


U PRIMARY GUARD ASSY (AWX9172)
R ICE SHIELD ASSY (AWX9173)
N PRE BRIDGE ASSY (AWX9146)
H CN6504
CN5751
CN5752
NM
XKP3062-A
XKP3073-A
CN6830
GNDCH2
GNDCH1
51048-0400
JH6990
52147-0410
JH6800
VNE1948-A
KN6990
CN6820
XKP3068-A
CN6810
XKP3069-A
P CN3801
P CN3800
GNDCH
V-12C
V+12C
GNDC
C-
C+
V-12L
V+12L
GNDL
L-
L+
V-12R
V+12R
GNDR
R-
R+
V-12SL
V+12SL
GNDSL
SL-
SL+
V-12SR
V+12SR
GNDSR
SR-
SR+
V-12SBL
V+12SBL
GNDSBL
SBL-
SBL+
V-12SBR
V+12SBR
GNDSBR
SBR-
SBR+
C6807
C6808
C6817
C6818
C6827
C6828
C6837
C6838
C6847
C6848
C6857
C6858
C6867
C6868
1000p CH
(C)
(FL)
(SL)
(SB)
(SW)
H CN6502
CN6951
52044-1945
CN6952
XKP3070-A
A CN5006
AMUTE
SBMUTE
GNDA
FR OUT
FL OUT
SW OUT
C OUT
RS OUT
LS OUT
SBR OUT
SBL OUT
GNDCH
CN6953
AKP7227-A
O CN6800

(FL) : Audio Signal Route (Front L ch)

(SL) : Audio Signal Route (Surround L ch)

(C) : Audio Signal Route (Center)

(SB) : Audio Signal Route (Surround Back L ch)

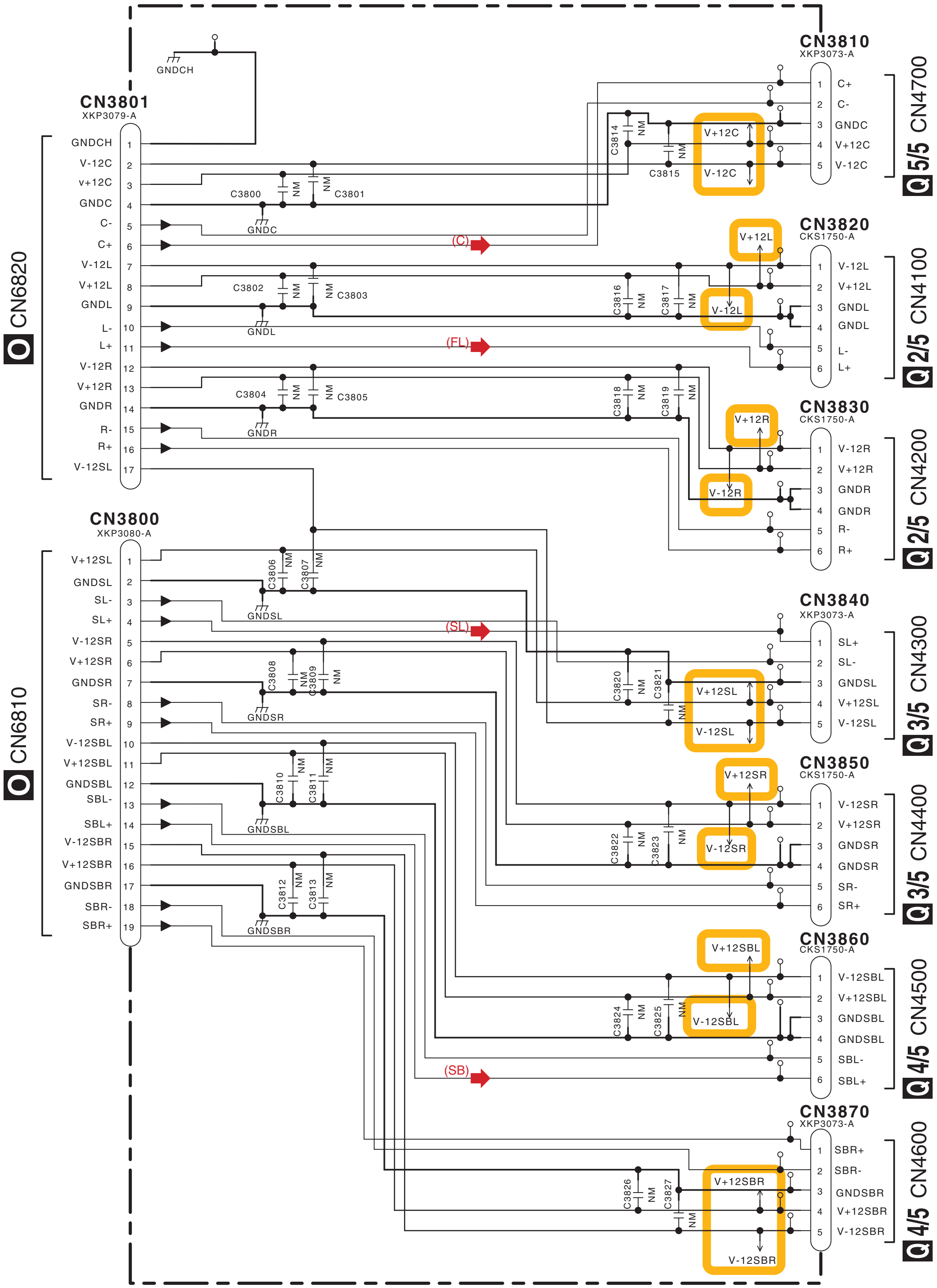
(SW) : Audio Signal Route (Subwoofer)

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB,CH:CCSRCH
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

10.20 ICE INTERFACE and ZOUT ASSYS

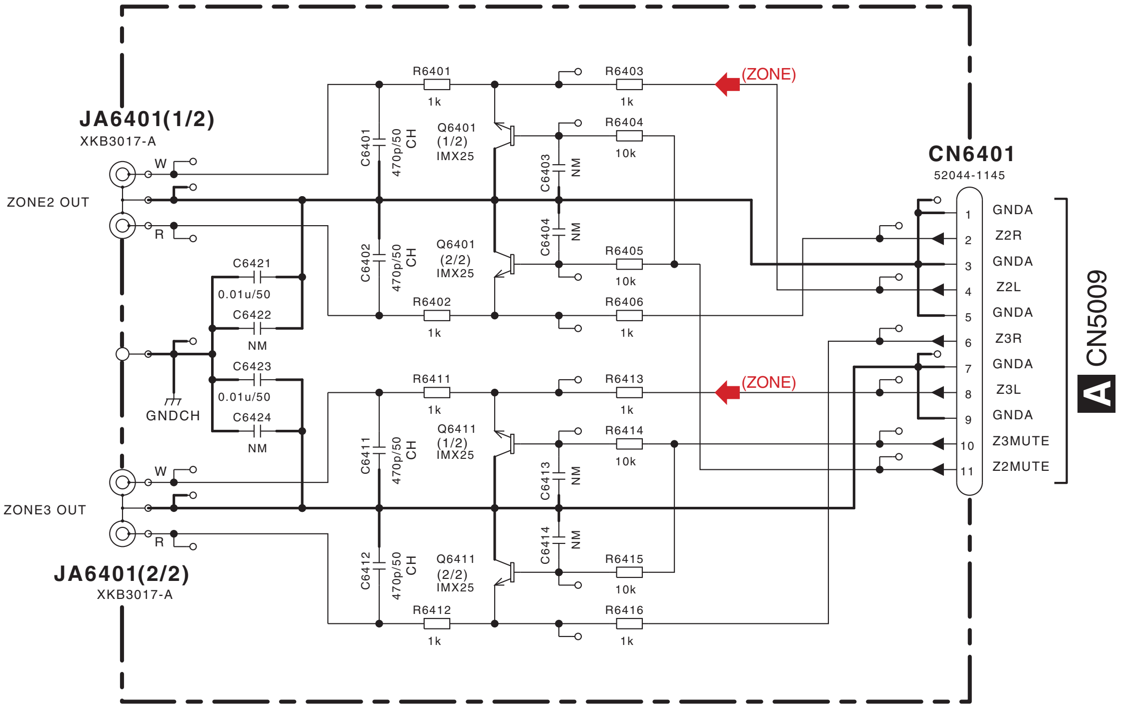
P ICE INTERFACE ASSY (AWX9137)


O CN6820
CN3801
XKP3079-A
GNDCH
V-12C
v+12C
GNDC
C-
C+
V-12L
V+12L
GNDL
L-
L+
V-12R
V+12R
GNDR
R-
R+
V-12SL
O CN6810
CN3800
XKP3080-A
V+12SL
GNDSL
SL-
SL+
V-12SR
V+12SR
GNDSR
SR-
SR+
V-12SBL
V+12SBL
GNDSBL
SBL-
SBL+
V-12SBR
V+12SBR
GNDSBR
SBR-
SBR+
GNDCH
C3800
C3801
C3802
C3803
C3804
C3805
C3806
C3807
C3808
C3809
C3810
C3811
C3812
C3813
C3814
C3815
C3816
C3817
C3818
C3819
C3820
C3821
C3822
C3823
C3824
C3825
C3826
C3827
NM
GNDC
GNDL
GNDR
GNDSL
GNDSR
GNDSBL
GNDSBR
(C)
(FL)
(SL)
(SB)
CN3810
XKP3073-A
C+
C-
GNDC
V+12C
V-12C
Q 5/5 CN4700
CN3820
CKS1750-A
V-12L
V+12L
GNDL
GNDL
L-
L+
Q 2/5 CN4100
CN3830
CKS1750-A
V-12R
V+12R
GNDR
GNDR
R-
R+
Q 2/5 CN4200
CN3840
XKP3073-A
SL+
SL-
GNDSL
V+12SL
V-12SL
Q 3/5 CN4300
CN3850
CKS1750-A
V-12SR
V+12SR
GNDSR
GNDSR
SR-
SR+
Q 3/5 CN4400
CN3860
CKS1750-A
V-12SBL
V+12SBL
GNDSBL
GNDSBL
SBL-
SBL+
Q 4/5 CN4500
CN3870
XKP3073-A
SBR+
SBR-
GNDSBR
V+12SBR
V-12SBR
Q 4/5 CN4600

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB,CH:CCSRCH
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

S ZOUT ASSY (AWX9143)


JA6401(1/2)
XKB3017-A
ZONE2 OUT
W
R
C6421
0.01u/50
C6422
NM
C6423
0.01u/50
C6424
NM
GNDCH
ZONE3 OUT
JA6401(2/2)
XKB3017-A
R6401
1k
C6401
470p/50
CH
Q6401
(1/2)
IMX25
C6402
470p/50
CH
Q6401
(2/2)
IMX25
R6402
1k
R6403
1k
(ZONE)
R6404
10k
C6403
NM
C6404
NM
R6405
10k
R6406
1k
R6411
1k
C6411
470p/50
CH
Q6411
(1/2)
IMX25
C6412
470p/50
CH
Q6411
(2/2)
IMX25
R6412
1k
R6413
1k
(ZONE)
R6414
10k
C6413
NM
C6414
NM
R6415
10k
R6416
1k
CN6401
52044-1145
1 GNDA
2 Z2R
3 GNDA
4 Z2L
5 GNDA
6 Z3R
7 GNDA
8 Z3L
9 GNDA
10 Z3MUTE
11 Z2MUTE
A CN5009

(FL) ➡ : Audio Signal Route (Front L ch)

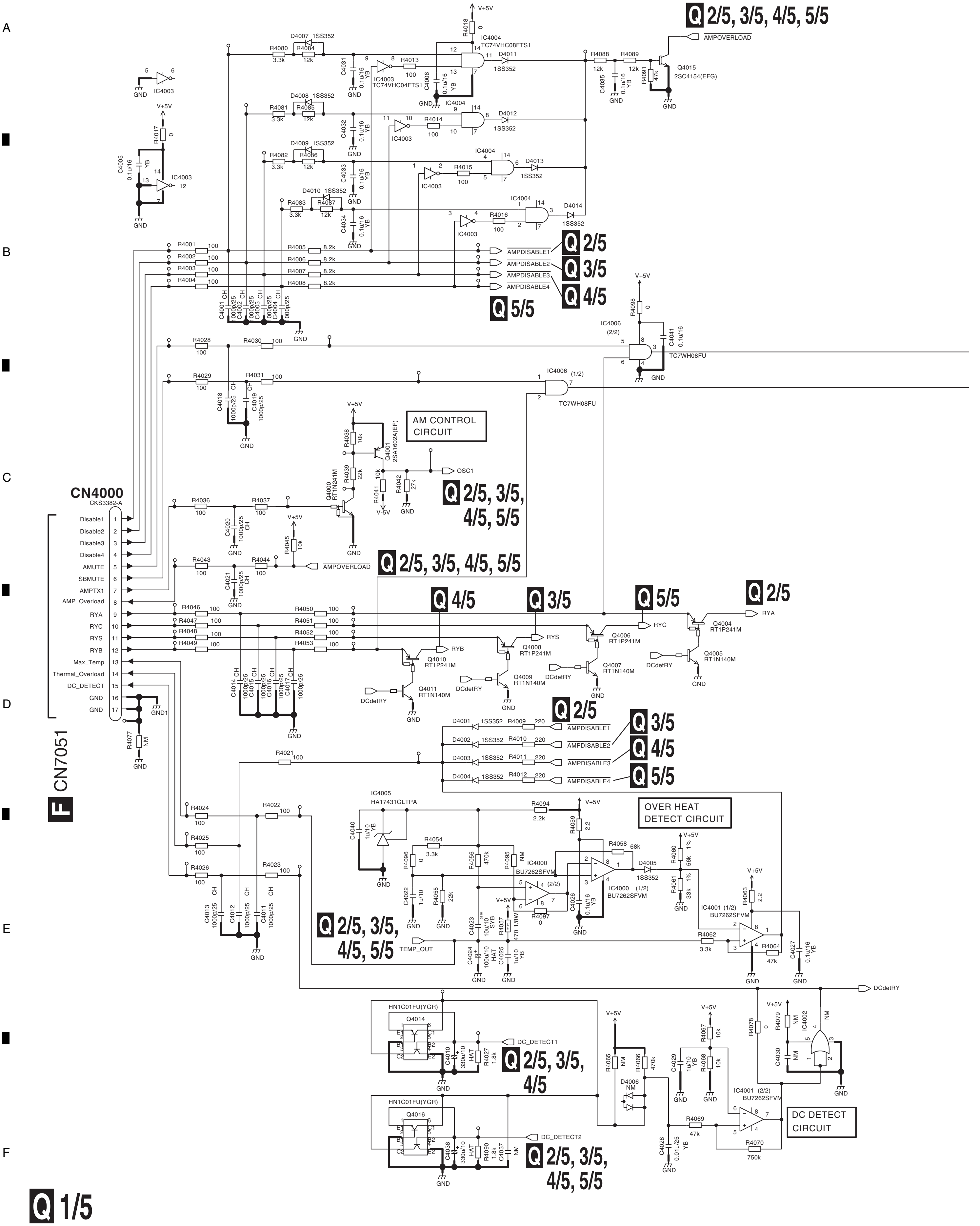
(SL) ➡ : Audio Signal Route (Surround L ch)

(C) ➡ : Audio Signal Route (Center)

(SB) ➡ : Audio Signal Route (Surround Back L ch)

(ZONE) ➡ : Audio Signal Route (Zone L ch)

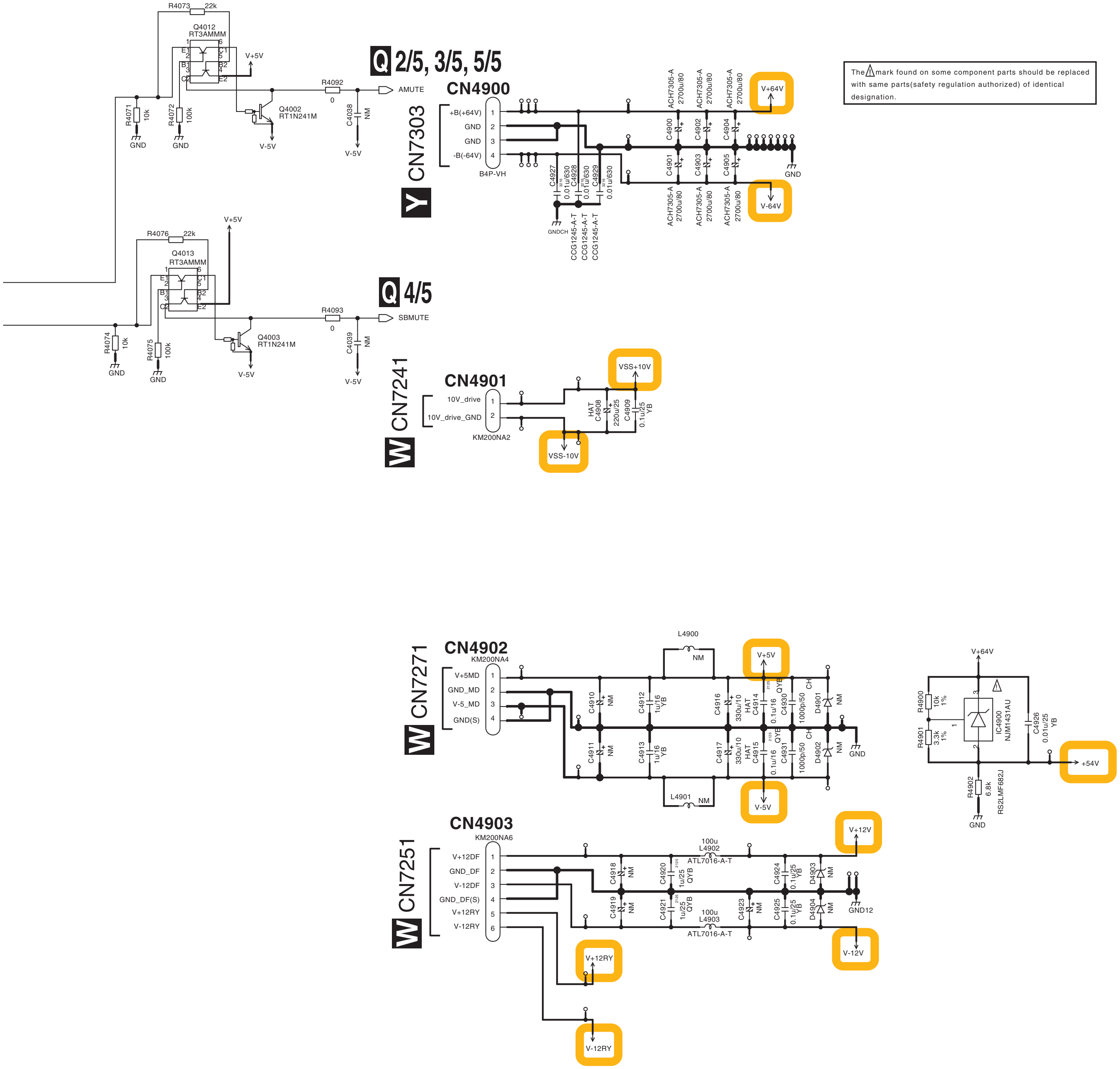
10.21 ICEPOWER AMP (1/5)


A
B
C
D
E
F
Q 2/5, 3/5, 4/5, 5/5
AMPOVERLOAD
Q4015
2SC4154(EFG)
IC4004
TC74VHC08FTS1
IC4003
TC74VHC04FTS1
D4007 1SS352
D4008 1SS352
D4009 1SS352
D4010 1SS352
D4011 1SS352
D4012 1SS352
D4013 1SS352
D4014 1SS352
R4080 3.3k
R4081 3.3k
R4082 3.3k
R4083 3.3k
R4084 12k
R4085 12k
R4086 12k
R4087 12k
R4013 100
R4014 100
R4015 100
R4016 100
R4088 12k
R4089 12k
R4091 47k
R4018 0
R4017 0
C4005 0.1u/16 YB
V+5V
GND
R4001 100
R4002 100
R4003 100
R4004 100
R4005 8.2k
R4006 8.2k
R4007 8.2k
R4008 8.2k
AMPDISABLE1
AMPDISABLE2
AMPDISABLE3
AMPDISABLE4
Q 2/5
Q 3/5
Q 4/5
Q 5/5
C4001 1000p/25 CH
C4002 1000p/25 CH
C4003 1000p/25 CH
C4004 1000p/25 CH
R4098 0
IC4006 (2/2)
C4041 0.1u/16
TC7WH08FU
R4028 100
R4030 100
R4029 100
R4031 100
IC4006 (1/2)
TC7WH08FU
C4018 1000p/25 CH
C4019 1000p/25 CH
AM CONTROL CIRCUIT
R4038 10k
Q4001 2SA1602A(EF)
R4039 22k
R4041 10k
R4042 27k
OSC1
V-5V
Q4000 RT1N241M
Q 2/5, 3/5, 4/5, 5/5
CN4000
CKS3382-A
R4036 100
R4037 100
C4020 1000p/25 CH
R4045 10k
R4043 100
R4044 100
C4021 1000p/25 CH
AMPOVERLOAD
Q 2/5, 3/5, 4/5, 5/5
1 Disable1
2 Disable2
3 Disable3
4 Disable4
5 AMUTE
6 SBMUTE
7 AMPTX1
8 AMP_Overload
9 RYA
10 RYC
11 RYS
12 RYB
13 Max_Temp
14 Thermal_Overload
15 DC_DETECT
16 GND
17 GND
GND1
R4077 NM
F CN7051
R4046 100
R4047 100
R4048 100
R4049 100
R4050 100
R4051 100
R4052 100
R4053 100
C4014 1000p/25 CH
C4015 1000p/25 CH
C4016 1000p/25 CH
C4017 1000p/25 CH
Q 4/5
Q 3/5
Q 5/5
Q 2/5
RYA
RYC
RYS
RYB
Q4004 RT1P241M
Q4005 RT1N140M
Q4006 RT1P241M
Q4007 RT1N140M
Q4008 RT1P241M
Q4009 RT1N140M
Q4010 RT1P241M
Q4011 RT1N140M
DCdetRY
D4001 1SS352
D4002 1SS352
D4003 1SS352
D4004 1SS352
R4009 220
R4010 220
R4011 220
R4012 220
R4021 100
IC4005
HA17431GLTPA
C4040 1u/10 YB
R4094 2.2k
R4059 2.2
OVER HEAT DETECT CIRCUIT
R4054 3.3k
R4096 0
R4056 470k
R4095 NM
IC4000 BU7262SFVM (2/2)
IC4000 (1/2) BU7262SFVM
R4058 68k
D4005 1SS352
R4060 56k 1%
R4061 33k 1%
R4097 0
C4026 0.1u/16 YB
C4022 1u/10
R4055 22k
C4023 10u/10 SYB
R4057 470 1/8W
C4024 100u/10 HAT
C4025 1u/10 YB
R4024 100
R4022 100
R4025 100
R4026 100
R4023 100
C4013 1000p/25 CH
C4012 1000p/25 CH
C4011 1000p/25 CH
Q 2/5, 3/5, 4/5, 5/5
TEMP_OUT
IC4001 (1/2) BU7262SFVM
R4063 2.2
R4062 3.3k
R4064 47k
C4027 0.1u/16 YB
DCdetRY
HN1C01FU(YGR)
Q4014
C4010 330u/10 HAT
R4027 1.8k
DC_DETECT1
Q 2/5, 3/5, 4/5
HN1C01FU(YGR)
Q4016
C4036 330u/10 HAT
R4090 1.8k
C4037 NM
DC_DETECT2
Q 2/5, 3/5, 4/5, 5/5
R4065 NM
R4066 470k
D4006 NM
C4029 1u/10 YB
R4067 10k
R4068 10k
R4078 0
R4079 NM
IC4002 NM
C4030 NM
IC4001 (2/2) BU7262SFVM
R4069 47k
R4070 750k
C4028 0.01u/25 YB
DC DETECT CIRCUIT

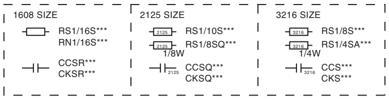
Q 1/5

Q 1/5 ICEPOWER AMP ASSY (AWH7017)

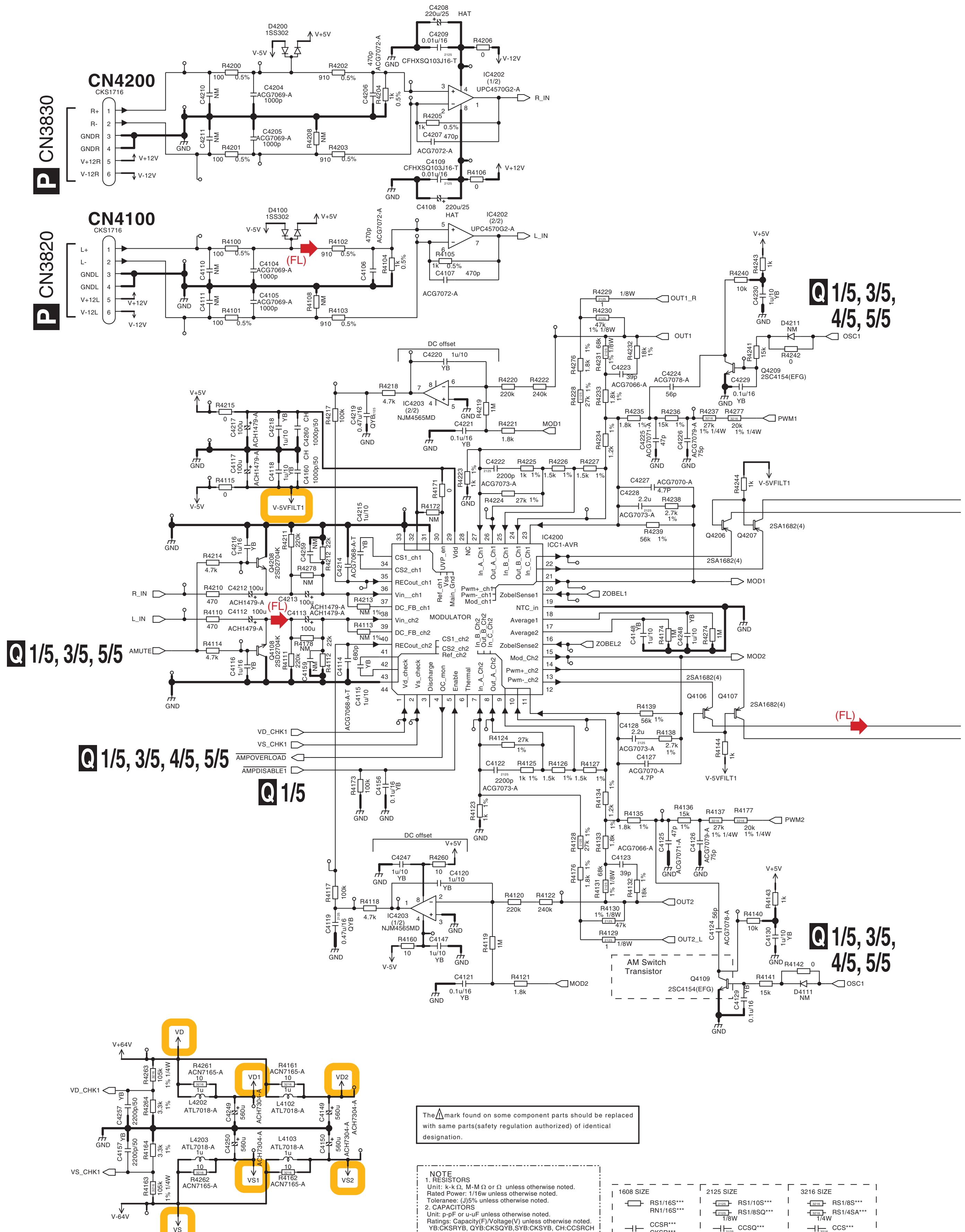
The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.


R4073 22k
Q4012
RT3AMMM
1 E1 2 B1 3 C2
6 C1 5 B2 4 E2
V+5V
R4071 10k
R4072 100k
GND
GND
Q4002
RT1N241M
V-5V
R4092
0
C4038 NM
V-5V
AMUTE
Q 2/5, 3/5, 5/5
Y CN7303
CN4900
+B(+64V) 1
GND 2
GND 3
-B(-64V) 4
B4P-VH
C4927 3216 0.01u/630
C4928 3216 0.01u/630
C4929 3216 0.01u/630
GNDCH
CCG1245-A-T
CCG1245-A-T
CCG1245-A-T
C4900 ACH7305-A 2700u/80
C4902 ACH7305-A 2700u/80
C4904 ACH7305-A 2700u/80
C4901 ACH7305-A 2700u/80
C4903 ACH7305-A 2700u/80
C4905 ACH7305-A 2700u/80
V+64V
V-64V
GND
V+5V
R4076 22k
Q4013
RT3AMMM
1 E1 2 B1 3 C2
6 C1 5 B2 4 E2
R4074 10k
R4075 100k
GND
GND
Q4003
RT1N241M
V-5V
R4093
0
C4039 NM
V-5V
SBMUTE
Q 4/5
W CN7241
CN4901
10V_drive 1
10V_drive_GND 2
KM200NA2
C4908 HAT 220u/25
C4909 0.1u/25 YB
VSS+10V
VSS-10V
W CN7271
CN4902
KM200NA4
V+5MD 1
GND_MD 2
V-5_MD 3
GND(S) 4
L4900 NM
V+5V
C4910 NM
C4911 NM
C4912 1u/16 YB
C4913 1u/16 YB
C4916 330u/10 HAT
C4917 330u/10 HAT
C4914 2125 0.1u/16 QYB
C4915 2125 0.1u/16 QYB
C4930 1000p/50 CH
C4931 1000p/50 CH
D4901 NM
D4902 NM
GND
L4901 NM
V-5V
V+64V
R4900 10k 1%
R4901 3.3k 1%
IC4900
NJM1431AU
⚠
1 2 3
C4926 0.01u/25 YB
+54V
R4902 6.8k
RS2LMF682J
GND
W CN7251
CN4903
KM200NA6
V+12DF 1
GND_DF 2
V-12DF 3
GND_DF(S) 4
V+12RY 5
V-12RY 6
C4918 NM
C4919 NM
C4920 2125 1u/25 QYB
C4921 2125 1u/25 QYB
100u
L4902
ATL7016-A-T
100u
L4903
ATL7016-A-T
C4923 NM
C4924 0.1u/25 YB
C4925 0.1u/25 YB
D4903 NM
D4904 NM
V+12V
GND12
V-12V
V+12RY
V-12RY

NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCSRCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount


1608 SIZE
RS1/16S***
RN1/16S***
CCSR***
CKSR***
2125 SIZE
2125
RS1/10S***
2125
RS1/8SQ***
1/8W
2125
CCSQ***
CKSQ***
3216 SIZE
3216
RS1/8S***
3216
RS1/4SA***
1/4W
3216
CCS***
CKS***

10.22 ICEPOWER AMP (2/5)

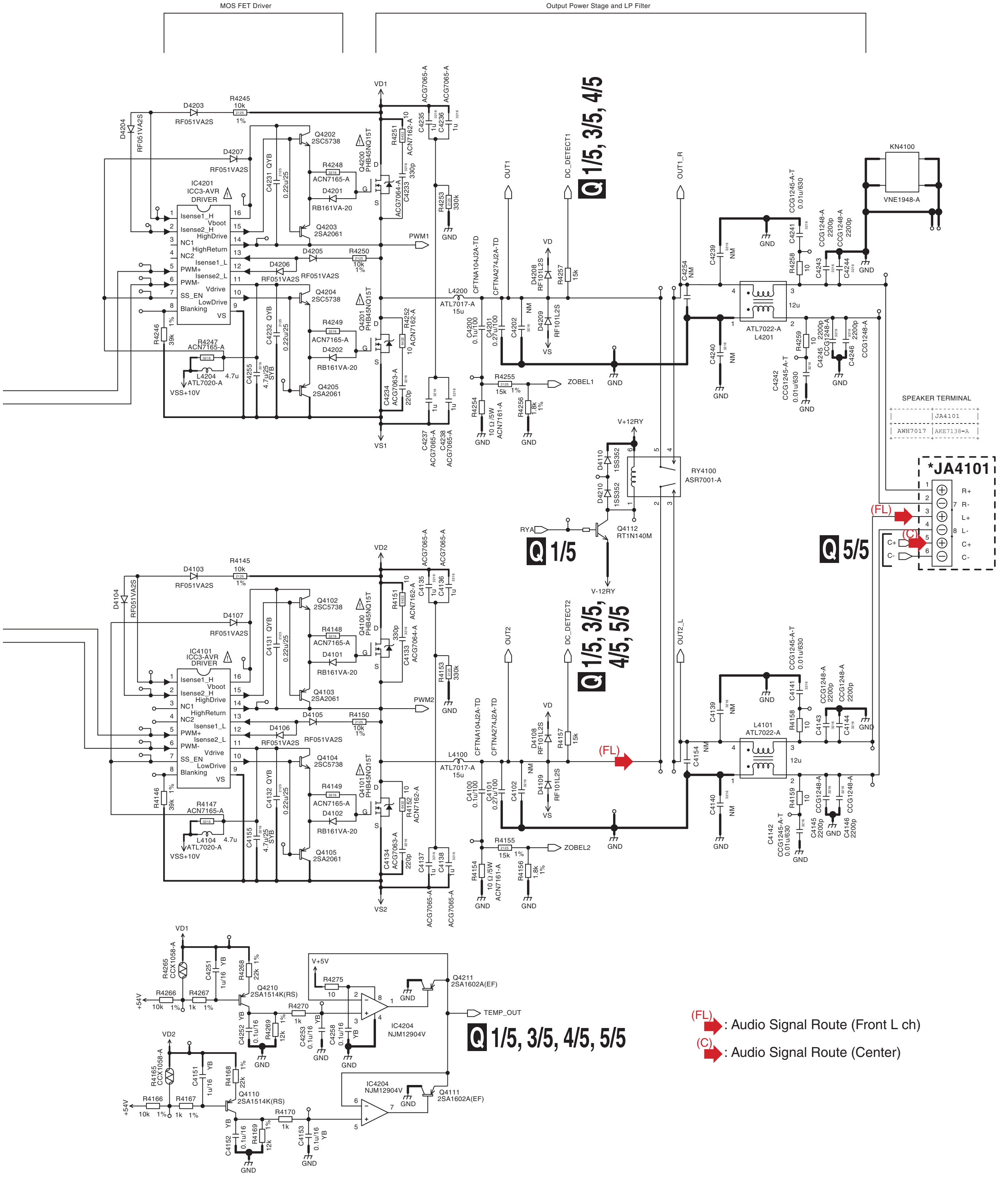

CN4200
CKS1716
P CN3830
R+
R-
GNDR
GNDR
V+12R
V-12R
V+12V
V-12V
CN4100
CKS1716
P CN3820
L+
L-
GNDL
GNDL
V+12L
V-12L
D4200
1SS302
D4100
1SS302
V-5V
V+5V
R4200 100 0.5%
R4201 100 0.5%
R4202 910 0.5%
R4203 910 0.5%
R4100 100 0.5%
R4101 100 0.5%
R4102 910 0.5%
R4103 910 0.5%
C4204 ACG7069-A 1000p
C4205 ACG7069-A 1000p
C4104 ACG7069-A 1000p
C4105 ACG7069-A 1000p
C4210 NM
C4211 NM
C4110 NM
C4111 NM
R4208 NM
R4108 NM
C4206 470p ACG7072-A
C4106 470p ACG7072-A
R4204 1k 0.5%
R4104 1k 0.5%
R4205 1k 0.5%
R4105 1k 0.5%
C4207 470p ACG7072-A
C4107 470p ACG7072-A
C4208 220u/25 HAT
C4209 0.01u/16 CFHXSQ103J16-T
C4108 220u/25 HAT
C4109 CFHXSQ103J16-T 0.01u/16
R4206 0
R4106 0
IC4202 (1/2) UPC4570G2-A
IC4202 (2/2) UPC4570G2-A
R_IN
L_IN
(FL)
GND
Q 1/5, 3/5, 4/5, 5/5
Q 1/5, 3/5, 5/5
Q 1/5
DC offset
C4220 1u/10 YB
IC4203 (2/2) NJM4565MD
IC4203 (1/2) NJM4565MD
R4218 4.7k
R4118 4.7k
R4217 100k
R4117 100k
C4219 0.47u/16 QYB
C4119 0.47u/16 QYB
R4219 1M
R4119 1M
R4220 220k
R4222 240k
R4120 220k
R4122 240k
C4221 0.1u/16 YB
R4221 1.8k
C4121 0.1u/16 YB
R4121 1.8k
MOD1
MOD2
R4215 0
R4115 0
C4217 100u ACH1479-A
C4117 100u ACH1479-A
C4218 1u/10 YB
C4118 1u/10 YB
C4260 CH 1000p/50
C4160 CH 1000p/50
V-5VFILT1
C4215 1u/10
C4216 1u/16 YB
C4116 1u/16 YB
R4214 4.7k
R4114 4.7k
Q4208 2SD2704K
Q4108 2SD2704K
R4211 220k
R4111 220k
C4259 NM
C4159 NM
R4212 22k
R4112 22k
R4278 NM
R4178 NM
C4214 680p ACG7068-A-T
C4114 680p
C4115 1u/10
R4210 470
R4110 470
C4212 100u ACH1479-A
C4112 100u ACH1479-A
C4213 100u ACH1479-A
C4113 100u ACH1479-A
R4213 NM 1%
R4113 NM 1%
R4171 0
R4172 NM
R4223 1k 1%
R4123 1k 1%
AMUTE
IC4200 ICC1-AVR
CS1_ch1
CS2_ch1
RECout_ch1
Vin_ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
CS1_ch2
CS2_ch2
Ref_ch2
MODULATOR
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
In_B_Ch2
Out_B_Ch2
In_C_Ch2
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Ref_ch1
Vss
Main_Gnd
Pwm+_ch1
Pwm-_ch1
Mod_ch1
ZobelSense1
NTC_in
Average1
Average2
ZobelSense2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
ZOBEL1
ZOBEL2
C4148 1u/10 YB
R4174 NM
C4248 1u/10 YB
R4274 1M
C4222 2200p ACG7073-A
C4122 2200p ACG7073-A
R4224 27k 1%
R4124 27k 1%
R4225 1k 1%
R4226 1.5k 1%
R4227 1.5k 1%
R4125 1k 1%
R4126 1.5k 1%
R4127 1.5k 1%
R4229 1/8W
R4230 47k 1% 1/8W
OUT1_R
OUT1
R4276 1.8k 1%
R4231 68k 1% 1/8W
R4232 18k 1%
C4223 39p ACG7066-A
R4228 27k 1%
R4233 1.8k 1%
R4234 1.2k 1%
R4235 1.8k 1%
R4236 15k 1%
R4237 27k 1% 1/4W
R4277 20k 1% 1/4W
PWM1
C4224 ACG7078-A 56p
C4225 ACG7071-A 47p
C4226 ACG7079-A 75p
R4240 10k
R4243 1k
C4230 1u/10 YB
D4211 NM
R4241 15k
R4242 0
OSC1
Q4209 2SC4154(EFG)
C4229 0.1u/16 YB
R4244 1k
V-5VFILT1
C4227 ACG7070-A 4.7P
C4228 2.2u ACG7073-A
R4238 2.7k 1%
R4239 56k 1%
Q4206
Q4207
2SA1682(4)
MOD1
MOD2
R4139 56k 1%
C4128 2.2u ACG7073-A
R4138 2.7k 1%
C4127 ACG7070-A 4.7P
Q4106
Q4107
R4144 1k
VD_CHK1
VS_CHK1
AMPOVERLOAD
AMPDISABLE1
R4173 100k
C4156 0.1u/16 YB
C4247 1u/10 YB
R4260 10
C4120 1u/10 YB
R4160 10
C4147 1u/10 YB
R4134 1.2k 1%
R4135 1.8k 1%
R4136 15k 1%
R4137 27k 1% 1/4W
R4177 20k 1% 1/4W
PWM2
C4125 ACG7071-A 47p
C4126 ACG7079-A 75p
R4128 27k 1%
R4133 1.8k 1%
C4123 39p ACG7066-A
R4176 1.8k 1%
R4131 68k 1% 1/8W
R4132 18k 1%
R4130 1% 1/8W 47k
R4129 1/8W
OUT2
OUT2_L
C4124 56p ACG7078-A
R4140 10k
R4143 1k
C4130 1u/10 YB
AM Switch Transistor
Q4109 2SC4154(EFG)
R4141 15k
R4142 0
D4111 NM
C4129 0.1u/16 YB
OSC1
V+64V
V-64V
VD
VD1
VD2
VS
VS1
VS2
R4263 105k 1% 1/4W
R4264 3.3k 1%
C4257 YB 2200p/50
C4157 YB 2200p/50
R4164 3.3k 1%
R4163 105k 1% 1/4W
R4261 ACN7165-A 10
R4161 ACN7165-A 10
L4202 ATL7018-A 1u
L4102 ATL7018-A 1u
L4203 ATL7018-A 1u
L4103 ATL7018-A 1u
R4262 ACN7165-A 10
R4162 ACN7165-A 10
C4249 560u ACH7304-A
C4149 560u ACH7304-A
C4250 560u ACH7304-A
C4150 560u ACH7304-A
A
B
C
D
E
F

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16W unless otherwise noted.
Tolerance: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCSRCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

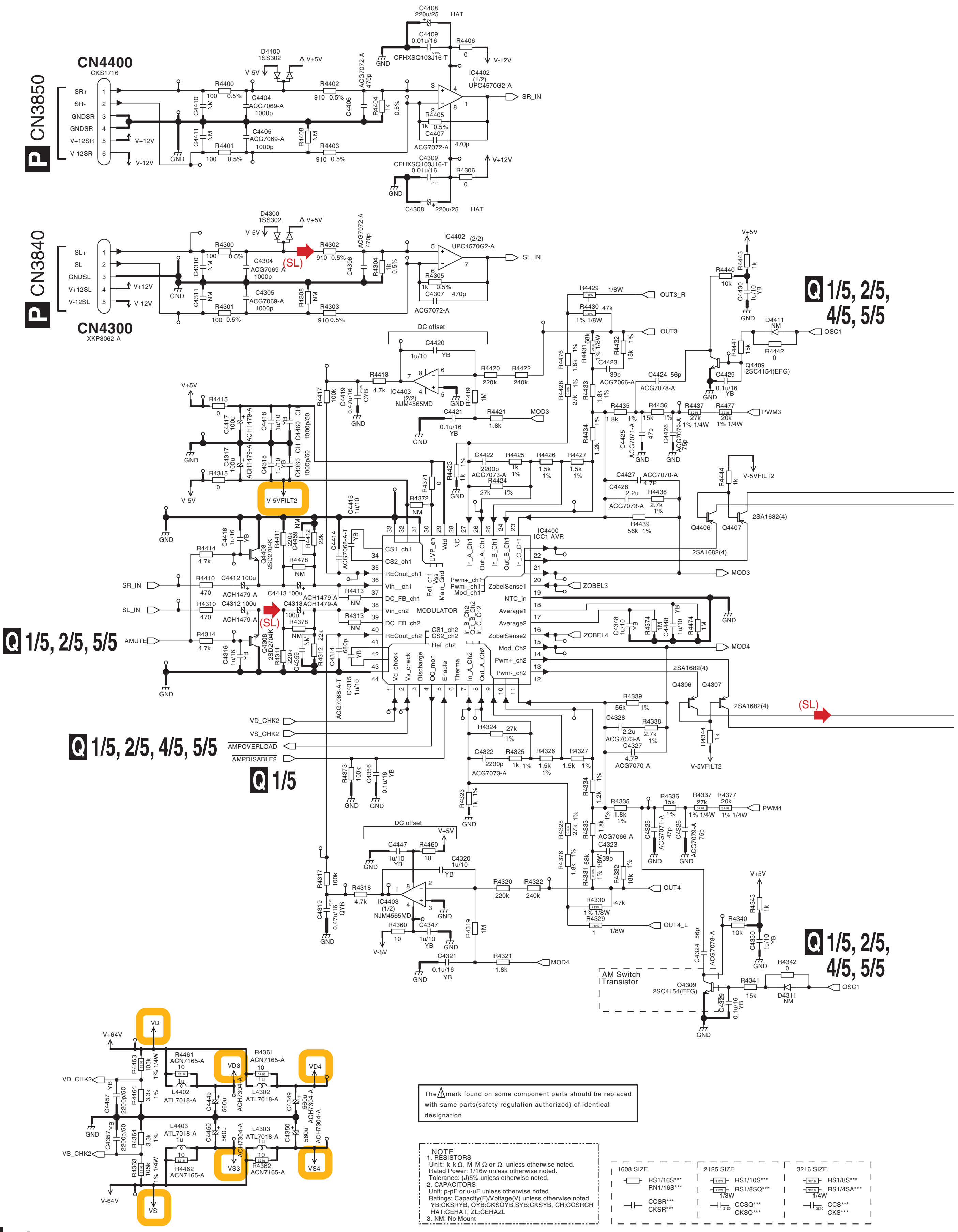
Q 2/5 ICEPOWER AMP ASSY (AWH7017)


MOS FET Driver
Output Power Stage and LP Filter
IC4201 ICC3-AVR DRIVER
IC4101 ICC3-AVR DRIVER
Isense1_H
Vboot
Isense2_H
HighDrive
NC1
HighReturn
NC2
Isense1_L
PWM+
Isense2_L
PWM-
Vdrive
SS_EN
LowDrive
Blanking
VS
D4203 RF051VA2S
D4204 RF051VA2S
D4207 RF051VA2S
R4245 10k 1%
Q4202 2SC5738
Q4203 2SA2061
Q4204 2SC5738
Q4205 2SA2061
Q4200 PHB45NQ15T
Q4201 PHB45NQ15T
R4248 ACN7165-A
R4249 ACN7165-A
D4201 RB161VA-20
D4202 RB161VA-20
D4205
D4206 RF051VA2S
R4250 10k 1%
R4251 10 ACN7162-A
R4252 10 ACN7162-A
C4231 0.22u/25 QYB
C4232 0.22u/25 QYB
C4233 330p ACG7064-A
C4234 220p ACG7063-A
C4235 1u ACG7065-A
C4236 1u ACG7065-A
C4237 1u ACG7065-A
C4238 1u ACG7065-A
R4253 330k
R4246 39k 1%
R4247 ACN7165-A
L4204 4.7u ATL7020-A
C4255 4.7u/25 SYB
VSS+10V
VD1
VS1
PWM1
GND
L4200 ATL7017-A 15u
CFTNA104J2A-TD
CFTNA274J2A-TD
C4200 0.1u/100
C4201 0.27u/100
C4202 NM
D4208 RF101L2S
D4209 RF101L2S
VD
VS
R4257 15k
OUT1
DC_DETECT1
OUT1_R
Q 1/5, 3/5, 4/5
R4255 15k 1%
ZOBEL1
R4254 10 Ω/5W ACN7161-A
R4256 1.8k 1%
C4254 NM
C4239 NM
C4240 NM
L4201 ATL7022-A 12u
C4241 0.01u/630 CCG1245-A-T
C4242 0.01u/630 CCG1245-A-T
C4243 2200p CCG1248-A
C4244 2200p CCG1248-A
C4245 2200p CCG1248-A
C4246 2200p CCG1248-A
R4258 10
R4259 10
KN4100 VNE1948-A
SPEAKER TERMINAL
JA4101
AWH7017
AKE7138-A
*JA4101
R+
R-
L+
L-
C+
C-
(FL)
(C)
Q 5/5
V+12RY
D4110 1SS352
D4210 1SS352
RY4100 ASR7001-A
RYA
Q4112 RT1N140M
Q 1/5
V-12RY
VD2
VS2
PWM2
D4103 RF051VA2S
D4104 RF051VA2S
D4107 RF051VA2S
R4145 10k 1%
Q4102 2SC5738
Q4103 2SA2061
Q4104 2SC5738
Q4105 2SA2061
Q4100 PHB45NQ15T
Q4101 PHB45NQ15T
R4148 ACN7165-A
R4149 ACN7165-A
D4101 RB161VA-20
D4102 RB161VA-20
D4105
D4106 RF051VA2S
R4150 10k 1%
R4151 10 ACN7162-A
R4152 10 ACN7162-A
C4131 0.22u/25 QYB
C4132 0.22u/25 QYB
C4133 330p ACG7064-A
C4134 220p ACG7063-A
C4135 1u ACG7065-A
C4136 1u ACG7065-A
C4137 1u ACG7065-A
C4138 1u ACG7065-A
R4153 330k
R4146 39k 1%
R4147 ACN7165-A
L4104 4.7u ATL7020-A
C4155 4.7u/25 SYB
L4100 ATL7017-A 15u
C4100 0.1u/100
C4101 0.27u/100
C4102 NM
D4108 RF101L2S
D4109 RF101L2S
R4157 15k
OUT2
DC_DETECT2
OUT2_L
Q 1/5, 3/5, 4/5, 5/5
(FL)
R4155 15k 1%
ZOBEL2
R4154 10 Ω/5W ACN7161-A
R4156 1.8k 1%
C4154 NM
C4139 NM
C4140 NM
L4101 ATL7022-A 12u
C4141 0.01u/630 CCG1245-A-T
C4142 0.01u/630 CCG1245-A-T
C4143 2200p CCG1248-A
C4144 2200p CCG1248-A
C4145 2200p CCG1248-A
C4146 2200p CCG1248-A
R4158 10
R4159 10
R4265 CCX1058-A
R4266 10k 1%
R4267 1k 1%
+54V
C4251 1u/16 YB
R4268 22k 1%
Q4210 2SA1514K(RS)
R4270 1k
C4252 0.1u/16 YB
R4269 12k 1%
C4253 0.1u/16 YB
C4258 0.1u/16 YB
V+5V
R4275 10
IC4204 NJM12904V
Q4211 2SA1602A(EF)
TEMP_OUT
Q 1/5, 3/5, 4/5, 5/5
R4165 CCX1058-A
R4166 10k 1%
R4167 1k 1%
C4151 1u/16 YB
R4168 22k 1%
Q4110 2SA1514K(RS)
R4170 1k
C4152 0.1u/16 YB
R4169 12k 1%
C4153 0.1u/16 YB
IC4204 NJM12904V
Q4111 2SA1602A(EF)

(FL) : Audio Signal Route (Front L ch)

(C) : Audio Signal Route (Center)

10.23 ICEPOWER AMP (3/5)


A
B
C
D
E
F
CN4400
CKS1716
P CN3850
SR+
SR-
GNDSR
GNDSR
V+12SR
V-12SR
V+12V
V-12V
GND
D4400
1SS302
V-5V
V+5V
R4400
100 0.5%
C4410 NM
C4411 NM
C4404
ACG7069-A
1000p
C4405
ACG7069-A
1000p
R4401
100 0.5%
R4402
910 0.5%
R4403
910 0.5%
R4408 NM
C4406
ACG7072-A
470p
R4404
1k 0.5%
C4408
220u/25 HAT
C4409
0.01u/16
CFHXSQ103J16-T
R4406
0
IC4402
(1/2)
UPC4570G2-A
R4405
1k 0.5%
C4407
ACG7072-A
470p
SR_IN
C4309
CFHXSQ103J16-T
0.01u/16
R4306
0
C4308 220u/25 HAT
P CN3840
CN4300
XKP3062-A
SL+
SL-
GNDSL
V+12SL
V-12SL
D4300
1SS302
R4300
100 0.5%
C4310 NM
C4311 NM
C4304
ACG7069-A
1000p
C4305
ACG7069-A
1000p
(SL)
R4302
910 0.5%
R4303
910 0.5%
R4301
100 0.5%
R4308 NM
C4306
ACG7072-A
470p
R4304
1k 0.5%
IC4402 (2/2)
UPC4570G2-A
R4305
1k 0.5%
C4307 470p
ACG7072-A
SL_IN
Q 1/5, 2/5, 4/5, 5/5
R4429 1/8W
OUT3_R
R4430 47k 1% 1/8W
OUT3
R4440 10k
R4443 1k
C4430 1u/10 YB
D4411 NM
OSC1
R4441 15k
R4442 0
Q4409
2SC4154(EFG)
C4429 0.1u/16 YB
DC offset
C4420
1u/10 YB
R4418 4.7k
IC4403 (2/2)
NJM4565MD
R4417 100k
C4419 0.47u/16 QYB
R4419 1M
R4420 220k
R4422 240k
R4476 1.8k 1%
R4428 27k 1%
R4431 68k 1% 1/8W
C4423 39p
ACG7066-A
R4432 18k 1%
R4433 1.8k 1%
C4424 56p
ACG7078-A
R4435 1.8k 1%
R4436 15k 1%
R4437 27k 1% 1/4W
R4477 20k 1% 1/4W
PWM3
C4421 0.1u/16 YB
R4421 1.8k
MOD3
R4434 1.2k 1%
C4425 47p ACG7071-A
C4426 75p ACG7079-A
V+5V
R4415 0
C4417 100u
C4418 1u/10 YB
C4460 1000p/50 CH
ACH1479-A
C4317 100u
C4318 1u/10 YB
C4360 1000p/50 CH
R4315 0
V-5V
V-5VFILT2
C4415 1u/10
R4371 0
R4372 NM
R4423 1k 1%
C4422 2200p ACG7073-A
R4425 1k 1%
R4426 1.5k 1%
R4427 1.5k 1%
R4424 27k 1%
C4427 4.7P ACG7070-A
C4428 2.2u ACG7073-A
R4438 2.7k 1%
R4439 56k 1%
R4444 1k
Q4406
Q4407
2SA1682(4)
IC4400
ICC1-AVR
C4416 1u/16 YB
R4414 4.7k
Q4408 2SD2704K
R4411 220k
C4459 NM
R4412 22k
R4478 NM
C4414 ACG7068-A-T
SR_IN
R4410 470
C4412 100u
ACH1479-A
C4413 100u
R4413 NM
SL_IN
R4310 470
C4312 100u
C4313 100u
R4313 NM
R4378 NM
AMUTE
R4314 4.7k
C4316 1u/16 YB
Q4308 2SD2704K
R4311 220k
C4359 NM
R4312 22k
C4314 680p
C4315 1u/10
ACG7068-A-T
Q 1/5, 2/5, 5/5
CS1_ch1
CS2_ch1
RECout_ch1
Vin__ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
MODULATOR
CS1_ch2
CS2_ch2
Ref_ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
Pwm+_ch2
Pwm-_ch2
Mod_Ch2
ZobelSense2
Average2
Average1
NTC_in
ZobelSense1
Pwm+_ch1
Pwm-_ch1
Mod_ch1
Ref_ch1
Vss
Main_Gnd
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
In_B_Ch2
Out_B_Ch2
In_C_Ch2
MOD3
ZOBEL3
ZOBEL4
MOD4
C4348 1u/10 YB
R4374 1M
C4448 1u/10 YB
R4474 1M
2SA1682(4)
Q4306
Q4307
R4339 56k 1%
C4328 2.2u ACG7073-A
R4338 2.7k 1%
C4327 4.7P ACG7070-A
R4344 1k
V-5VFILT2
VD_CHK2
VS_CHK2
AMPOVERLOAD
AMPDISABLE2
Q 1/5, 2/5, 4/5, 5/5
Q 1/5
R4373 100k
C4356 0.1u/16 YB
R4324 27k 1%
C4322 2200p ACG7073-A
R4325 1k 1%
R4326 1.5k 1%
R4327 1.5k 1%
R4323 1k 1%
R4334 1.2k 1%
R4335 1.8k 1%
R4336 15k 1%
R4337 27k 1% 1/4W
R4377 20k 1% 1/4W
PWM4
C4325 47p ACG7071-A
C4326 75p ACG7079-A
R4333 1.8k 1%
ACG7066-A
C4323 39p
R4328 27k 1%
R4376 1.8k 1%
R4331 68k 1% 1/8W
R4332 18k 1%
DC offset
C4447 1u/10 YB
R4460 10
C4320 1u/10 YB
R4317 100k
C4319 0.47u/16 QYB
R4318 4.7k
IC4403 (1/2)
NJM4565MD
R4360 10
C4347 1u/10 YB
R4319 1M
R4320 220k
R4322 240k
OUT4
R4330 47k 1% 1/8W
R4329 1 1/8W
OUT4_L
C4321 0.1u/16 YB
R4321 1.8k
MOD4
AM Switch
Transistor
Q4309
2SC4154(EFG)
C4324 56p ACG7078-A
R4343 1k
R4340 10k
C4330 1u/10 YB
R4342 0
R4341 15k
D4311 NM
OSC1
C4329 0.1u/16 YB
Q 1/5, 2/5, 4/5, 5/5
V+64V
VD
R4463 105k 1% 1/4W
R4461 ACN7165-A 10
L4402 1u ATL7018-A
VD3
C4449 560u ACH7304-A
R4361 ACN7165-A 10
L4302 1u ATL7018-A
C4349 560u ACH7304-A
VD4
VD_CHK2
C4457 2200p/50 YB
R4464 3.3k 1%
GND
C4357 2200p/50 YB
R4364 3.3k 1%
L4403 ATL7018-A 1u
C4450 560u ACH7304-A
L4303 ATL7018-A 1u
C4350 560u ACH7304-A
VS_CHK2
R4363 105k 1% 1/4W
R4462 ACN7165-A 10
VS3
R4362 ACN7165-A 10
VS4
V-64V
VS

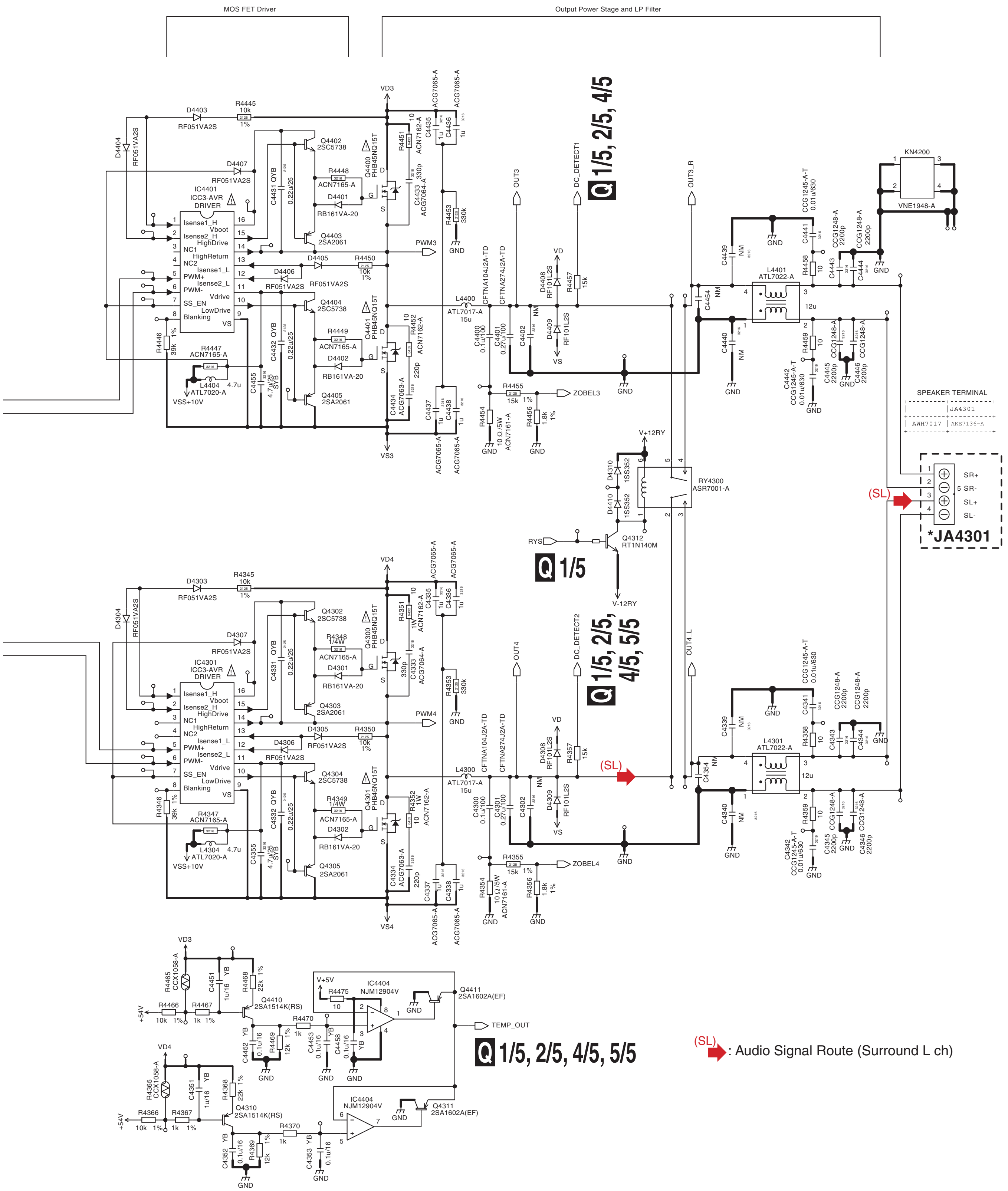
The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCSRCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

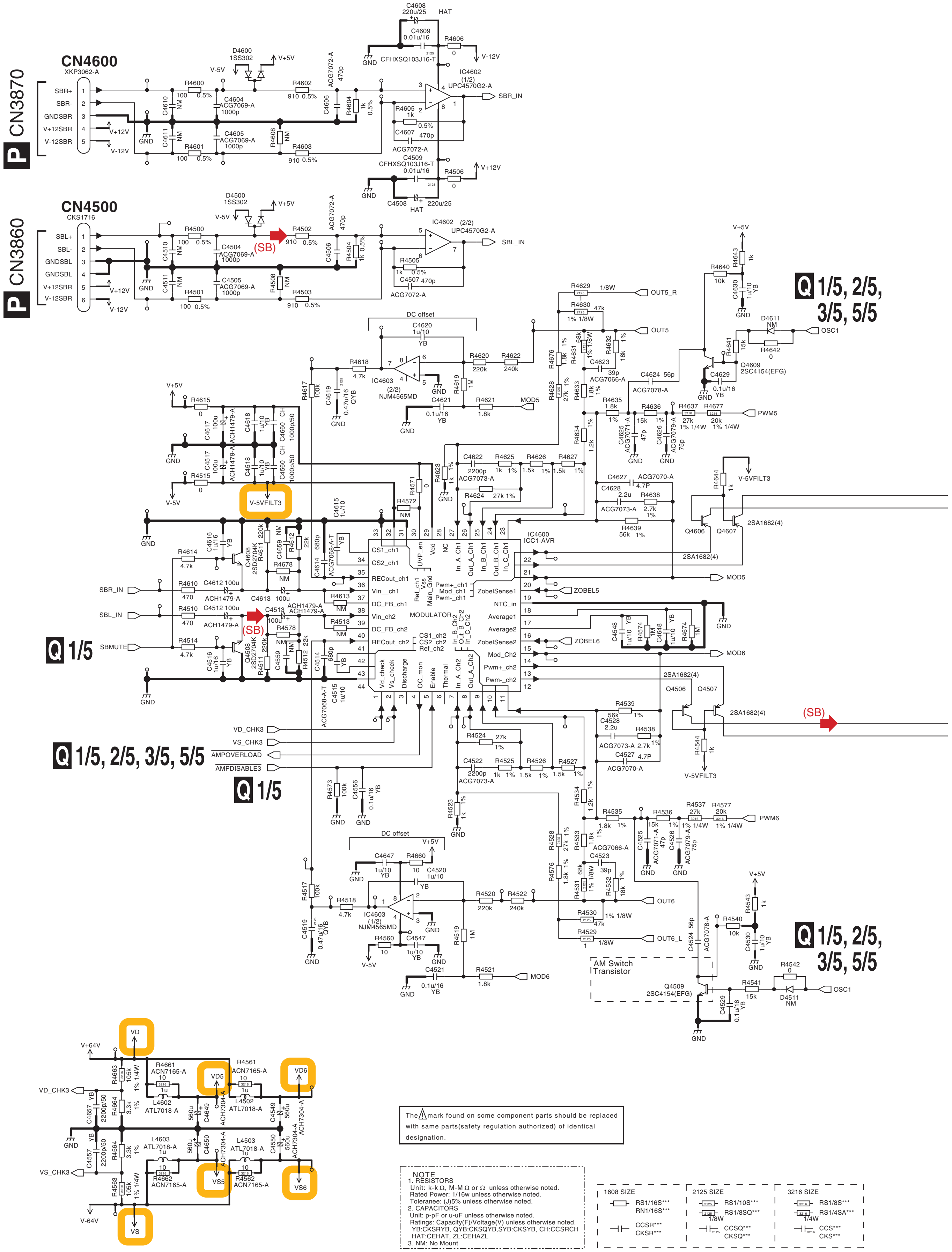
Q 3/5

Q 3/5 ICEPOWER AMP ASSY (AWH7017)


MOS FET Driver
Output Power Stage and LP Filter
IC4401 ICC3-AVR DRIVER
IC4301 ICC3-AVR DRIVER
Isense1_H
Vboot
Isense2_H
HighDrive
NC1
HighReturn
NC2
Isense1_L
PWM+
Isense2_L
PWM-
Vdrive
SS_EN
LowDrive
Blanking
VS
VD3
VS3
VD4
VS4
D4403 RF051VA2S
D4404 RF051VA2S
D4407 RF051VA2S
R4445 10k 1%
Q4402 2SC5738
Q4403 2SA2061
Q4404 2SC5738
Q4405 2SA2061
Q4400 PHB45NQ15T
Q4401 PHB45NQ15T
R4448 ACN7165-A
R4449 ACN7165-A
D4401 RB161VA-20
D4402 RB161VA-20
D4405
D4406 RF051VA2S
R4450 10k 1%
R4446 39k 1%
R4447 ACN7165-A
L4404 ATL7020-A 4.7u
VSS+10V
C4431 OYB 0.22u/25
C4432 OYB 0.22u/25
C4455 4.7u/25 SYB
R4451 10 ACN7162-A
R4452 10 ACN7162-A
C4433 330p ACG7064-A
C4434 ACG7063-A 220p
C4435 1u
C4436 1u
C4437 1u
C4438 1u
ACG7065-A
R4453 330k
GND
PWM3
OUT3
DC_DETECT1
OUT3_R
L4400 ATL7017-A 15u
CFTNA104J2A-TD
CFTNA274J2A-TD
C4400 0.1u/100
C4401 0.27u/100
C4402 NM
D4408 RF101L2S
D4409 RF101L2S
VD
VS
R4457 15k
R4455 15k 1%
R4454 10 Ω/5W ACN7161-A
R4456 1.8k 1%
ZOBEL3
C4439 NM
C4440 NM
C4454 NM
L4401 ATL7022-A 12u
C4441 CCG1245-A-T 0.01u/630
C4442 CCG1245-A-T 0.01u/630
R4458 10
R4459 10
C4443 CCG1248-A 2200p
C4444 CCG1248-A 2200p
C4445 CCG1248-A 2200p
C4446 CCG1248-A 2200p
KN4200 VNE1948-A
SPEAKER TERMINAL
JA4301
AWH7017
AKE7136-A
SR+
SR-
SL+
SL-
*JA4301
(SL)
V+12RY
V-12RY
D4310 1SS352
D4410 1SS352
RY4300 ASR7001-A
RYS
Q4312 RT1N140M
Q 1/5
Q 1/5, 2/5, 4/5
Q 1/5, 2/5, 4/5, 5/5
D4303 RF051VA2S
D4304 RF051VA2S
D4307 RF051VA2S
R4345 10k 1%
Q4302 2SC5738
Q4303 2SA2061
Q4304 2SC5738
Q4305 2SA2061
Q4300 PHB45NQ15T
Q4301 PHB45NQ15T
R4348 1/4W ACN7165-A
R4349 1/4W ACN7165-A
D4301 RB161VA-20
D4302 RB161VA-20
D4305
D4306 RF051VA2S
R4350 10k 1%
R4346 39k 1%
R4347 ACN7165-A
L4304 ATL7020-A 4.7u
C4331 OYB 0.22u/25
C4332 OYB 0.22u/25
C4355 4.7u/25 SYB
R4351 10 1W ACN7162-A
R4352 10 1W ACN7162-A
C4333 330p ACG7064-A
C4334 ACG7063-A 220p
C4335 1u
C4336 1u
C4337 1u
C4338 1u
R4353 330k
PWM4
OUT4
DC_DETECT2
OUT4_L
L4300 ATL7017-A 15u
C4300 0.1u/100
C4301 0.27u/100
C4302 NM
D4308 RF101L2S
D4309 RF101L2S
R4357 15k
R4355 15k 1%
R4354 10 Ω/5W ACN7161-A
R4356 1.8k 1%
ZOBEL4
C4339 NM
C4340 NM
C4354 NM
L4301 ATL7022-A 12u
C4341 CCG1245-A-T 0.01u/630
C4342 CCG1245-A-T 0.01u/630
R4358 10
R4359 10
C4343 CCG1248-A 2200p
C4344 CCG1248-A 2200p
C4345 CCG1248-A 2200p
C4346 CCG1248-A 2200p
R4465 CCX1058-A
C4451 1u/16 YB
R4468 22k 1%
R4466 10k 1%
R4467 1k 1%
+54V
Q4410 2SA1514K(RS)
R4470 1k
C4452 YB 0.1u/16
R4469 12k 1%
V+5V
R4475 10
IC4404 NJM12904V
Q4411 2SA1602A(EF)
C4453 0.1u/16 YB
C4458 0.1u/16 YB
TEMP_OUT
R4365 CCX1058-A
C4351 1u/16 YB
R4368 22k 1%
R4366 10k 1%
R4367 1k 1%
Q4310 2SA1514K(RS)
R4370 1k
C4352 YB 0.1u/16
R4369 12k 1%
C4353 YB 0.1u/16
Q4311 2SA1602A(EF)

(SL) : Audio Signal Route (Surround L ch)

10.24 ICEPOWER AMP (4/5)


A
B
C
D
E
F
P CN3870
CN4600
XKP3062-A
SBR+
SBR-
GNDSBR
V+12SBR
V-12SBR
P CN3860
CN4500
CKS1716
SBL+
SBL-
GNDSBL
V+12SBR
V-12SBR
D4600
1SS302
D4500
1SS302
V-5V
V+5V
V+12V
V-12V
R4600 100 0.5%
R4601 100 0.5%
R4602 910 0.5%
R4603 910 0.5%
C4604 ACG7069-A 1000p
C4605 ACG7069-A 1000p
C4606 ACG7072-A 470p
C4608 220u/25 HAT
C4609 0.01u/16 CFHXSQ103J16-T
R4606 0
IC4602 (1/2) UPC4570G2-A
SBR_IN
R4605 1k 0.5%
C4607 470p ACG7072-A
C4509 CFHXSQ103J16-T 0.01u/16
R4506 0
C4508 220u/25 HAT
R4500 100 0.5%
R4501 100 0.5%
R4502 910 0.5%
R4503 910 0.5%
C4504 ACG7069-A 1000p
C4505 ACG7069-A 1000p
(SB)
IC4602 (2/2) UPC4570G2-A
SBL_IN
R4505 1k 0.5%
C4507 470p ACG7072-A
GND
Q 1/5, 2/5, 3/5, 5/5
R4629 1/8W
OUT5_R
R4630 47k 1% 1/8W
OUT5
DC offset
C4620 1u/10 YB
IC4603 (2/2) NJM4565MD
R4618 4.7k
R4620 220k
R4622 240k
R4621 1.8k
MOD5
C4621 0.1u/16 YB
R4617 100k
C4619 0.47u/16 QYB
R4619 1M
R4640 10k
R4643 1k
C4630 1u/10 YB
D4611 NM
R4642 0
R4641 15k
OSC1
Q4609 2SC4154(EFG)
C4629 0.1u/16 YB
C4624 56p ACG7078-A
C4623 39p ACG7066-A
R4676 1.8k 1%
R4631 68k 1% 1/8W
R4632 18k 1%
R4628 27k 1%
R4633 1.8k 1%
R4635 1.8k 1%
R4636 15k 1%
R4637 27k 1% 1/4W
R4677 20k 1% 1/4W
PWM5
C4625 ACG7071-A 47p
C4626 ACG7079-A 75p
R4634 1.2k 1%
R4615 0
R4515 0
C4617 100u ACH1479-A
C4517 100u ACH1479-A
C4618 1u/10 YB
C4518 1u/10 YB
C4660 CH 1000p/50
C4560 CH 1000p/50
V-5VFILT3
C4622 2200p ACG7073-A
R4625 1k 1%
R4626 1.5k 1%
R4627 1.5k 1%
R4624 27k 1%
R4623 1k 1%
R4571 0
R4572 NM
C4615 1u/10
C4627 4.7P ACG7070-A
C4628 2.2u ACG7073-A
R4638 2.7k 1%
R4639 56k 1%
R4644 1k
V-5VFILT3
Q4606
Q4607
2SA1682(4)
IC4600 ICC1-AVR
CS1_ch1
CS2_ch1
RECout_ch1
Vin_ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Ref_ch1
Vss
Main_Gnd
Pwm+_ch1
Mod_ch1
Pwm-_ch1
ZobelSense1
NTC_in
Average1
Average2
ZobelSense2
MODULATOR
CS1_ch2
CS2_ch2
Ref_ch2
In_B_Ch2
Out_B_Ch2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
ZOBEL5
ZOBEL6
MOD5
MOD6
2SA1682(4)
C4548 1u/10 YB
R4574 1M
C4648 1u/10 YB
R4674 1M
R4614 4.7k
R4514 4.7k
C4616 1u/16 YB
C4516 1u/16 YB
Q4608 2SD2704K
Q4508 2SD2704K
R4611 220k
R4511 220k
C4659 NM
C4559 NM
R4612 22k
R4512 22k
R4678 NM
R4578 NM
C4614 680p ACG7068-A-T
C4514 680p
C4515 1u/10 ACG7068-A-T
SBR_IN
SBL_IN
SBMUTE
R4610 470
R4510 470
C4612 100u ACH1479-A
C4512 100u ACH1479-A
C4613 100u ACH1479-A
C4513 100u ACH1479-A
R4613 NM
R4513 NM
Q 1/5
VD_CHK3
VS_CHK3
AMPOVERLOAD
AMPDISABLE3
Q 1/5, 2/5, 3/5, 5/5
Q 1/5
R4573 100k
C4556 0.1u/16 YB
R4539 56k 1%
C4528 2.2u
R4538 2.7k 1%
ACG7073-A
C4527 4.7P ACG7070-A
Q4506
Q4507
2SA1682(4)
(SB)
R4544 1k
V-5VFILT3
R4524 27k 1%
C4522 2200p ACG7073-A
R4525 1k 1%
R4526 1.5k 1%
R4527 1.5k 1%
R4523 1k 1%
R4534 1.2k 1%
R4535 1.8k 1%
R4536 15k 1%
R4537 27k 1% 1/4W
R4577 20k 1% 1/4W
PWM6
C4525 ACG7071-A 47p
C4526 ACG7079-A 75p
DC offset
V+5V
C4647 1u/10 YB
R4660 10
C4520 1u/10 YB
R4528 27k 1%
R4533 1.8k 1%
C4523 39p ACG7066-A
R4576 1.8k 1%
R4531 68k 1% 1/8W
R4532 18k 1%
R4517 100k
C4519 0.47u/16 QYB
R4518 4.7k
IC4603 (1/2) NJM4565MD
R4560 10
C4547 1u/10 YB
R4520 220k
R4522 240k
R4519 1M
OUT6
R4530 47k 1% 1/8W
R4529 1 1/8W
OUT6_L
C4521 0.1u/16 YB
R4521 1.8k
MOD6
C4524 56p ACG7078-A
R4540 10k
R4543 1k
C4530 1u/10 YB
Q 1/5, 2/5, 3/5, 5/5
AM Switch Transistor
Q4509 2SC4154(EFG)
R4542 0
R4541 15k
D4511 NM
OSC1
C4529 0.1u/16 YB
VD
V+64V
R4663 105k 1% 1/4W
R4661 ACN7165-A 10
L4602 ATL7018-A 1u
VD5
R4561 ACN7165-A 10
L4502 ATL7018-A 1u
VD6
VD_CHK3
R4664 3.3k 1%
C4657 YB 2200p/50
C4649 560u ACH7304-A
C4549 560u ACH7304-A
GND
C4557 YB 2200p/50
R4564 3.3k 1%
L4603 ATL7018-A 1u
C4650 560u ACH7304-A
L4503 ATL7018-A 1u
C4550 560u ACH7304-A
VS_CHK3
R4563 105k 1% 1/4W
R4662 10 ACN7165-A
VS5
R4562 10 ACN7165-A
VS6
V-64V
VS

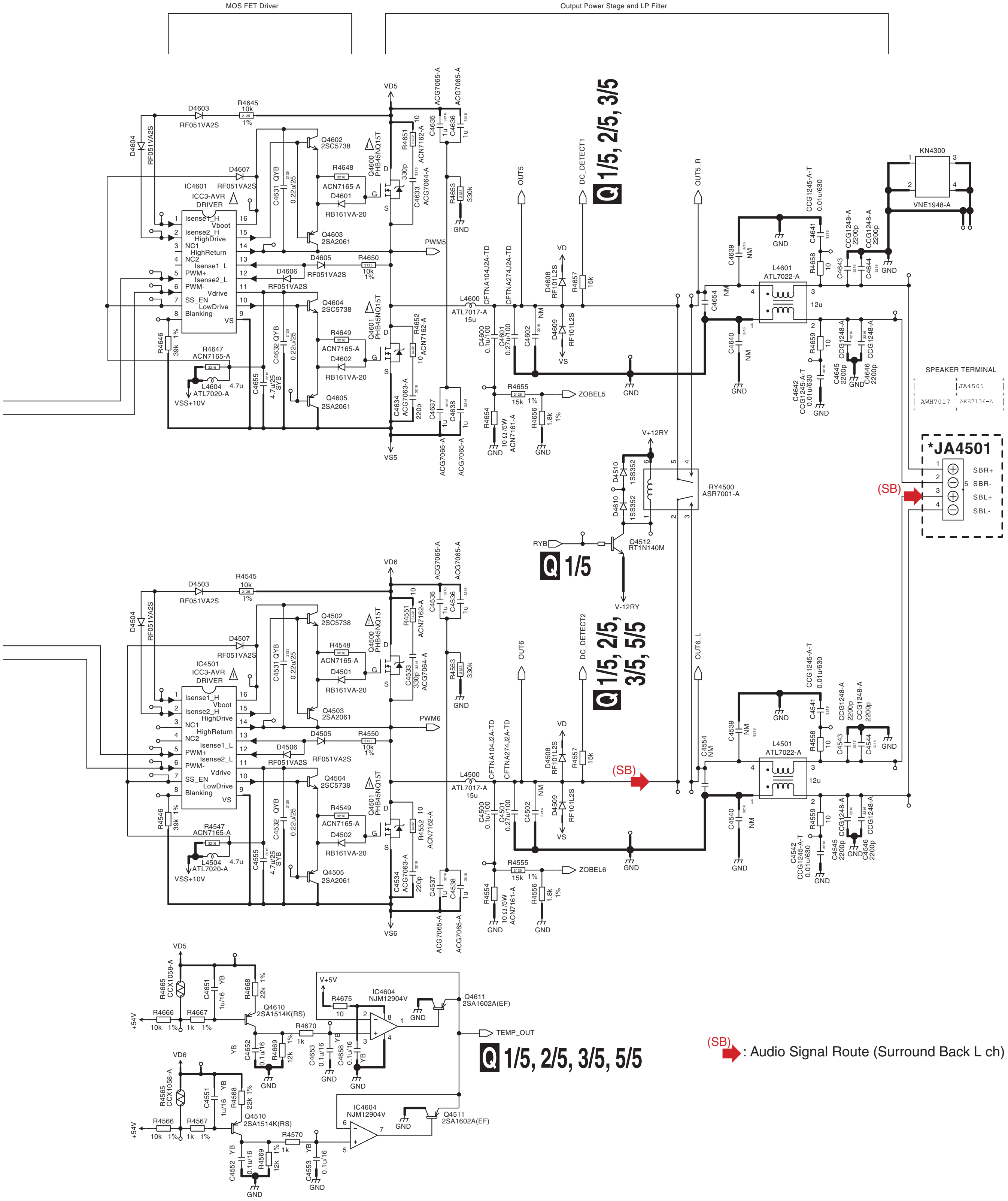
The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16W unless otherwise noted.
Tolerance: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCRSCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

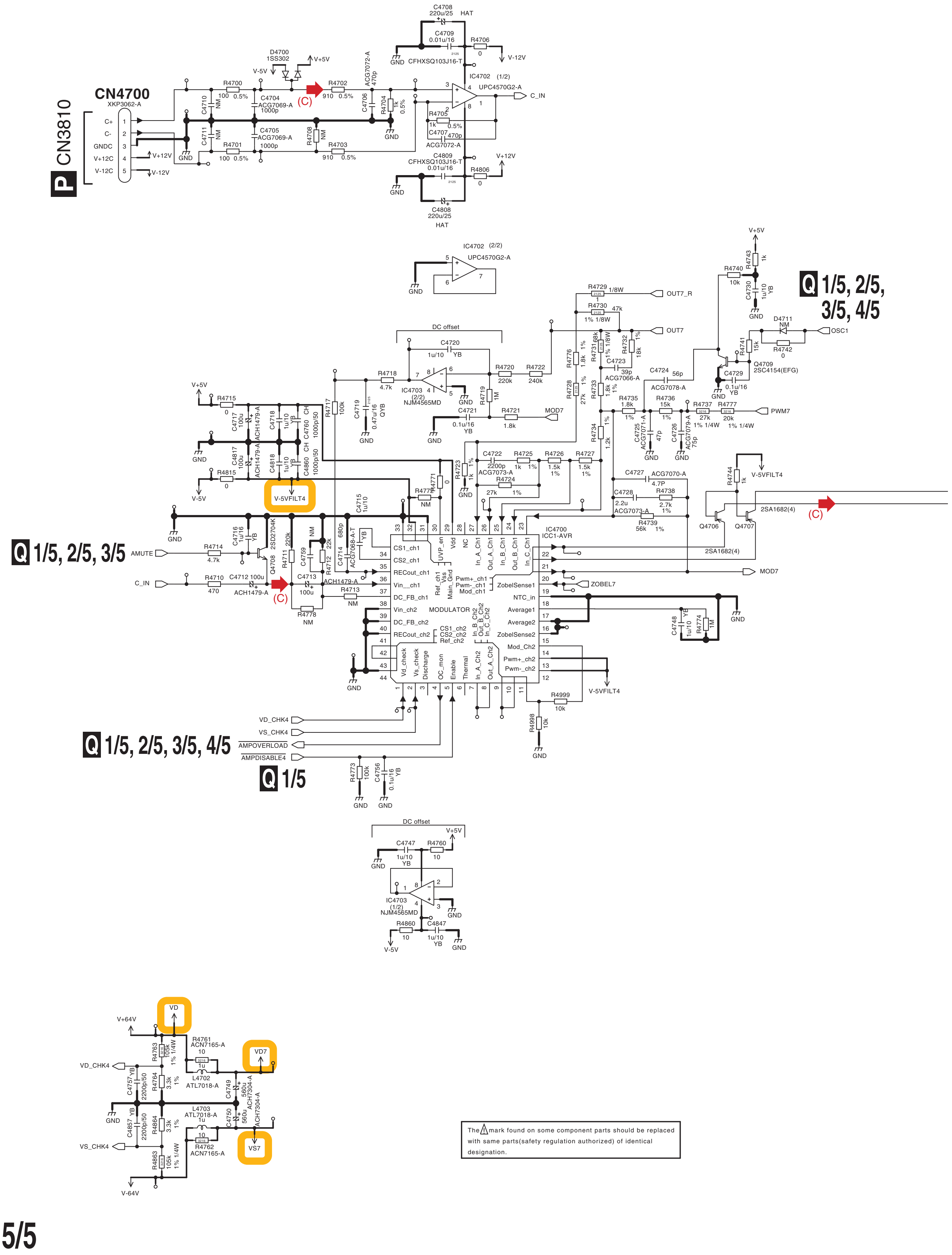
Q 4/5

Q 4/5 ICEPOWER AMP ASSY (AWH7017)


MOS FET Driver
Output Power Stage and LP Filter
Q 1/5, 2/5, 3/5
Q 1/5
Q 1/5, 2/5, 3/5, 5/5
Q 1/5, 2/5, 3/5, 5/5
VD5
VS5
VD6
VS6
D4603
RF051VA2S
R4645
10k
1%
D4604
RF051VA2S
D4607
RF051VA2S
IC4601
ICC3-AVR
DRIVER
Isense1_H
Vboot
Isense2_H
HighDrive
NC1
HighReturn
NC2
Isense1_L
PWM+
Isense2_L
PWM-
Vdrive
SS_EN
LowDrive
Blanking
VS
R4646
39k
R4647
ACN7165-A
L4604
ATL7020-A
4.7u
VSS+10V
C4655
4.7u/25
SYB
C4631 QYB
0.22u/25
C4632 QYB
0.22u/25
Q4602
2SC5738
Q4603
2SA2061
Q4604
2SC5738
Q4605
2SA2061
R4648
ACN7165-A
D4601
RB161VA-20
R4649
ACN7165-A
D4602
RB161VA-20
Q4600
PHB45NQ15T
Q4601
PHB45NQ15T
D4605
D4606
RF051VA2S
R4650
10k
1%
PWM5
R4651
10
ACN7162-A
R4652
10
ACN7162-A
330p
C4633
ACG7064-A
C4634
ACG7063-A
220p
C4635
1u
C4636
1u
C4637
1u
C4638
1u
ACG7065-A
R4653
330k
GND
L4600
ATL7017-A
15u
CFTNA104J2A-TD
CFTNA274J2A-TD
C4600
0.1u/100
C4601
0.27u/100
C4602
NM
OUT5
DC_DETECT1
D4608
RF101L2S
D4609
RF101L2S
VD
VS
R4657
15k
R4655
15k
1%
ZOBEL5
R4654
10 Ω /5W
ACN7161-A
R4656
1.8k
1%
OUT5_R
C4639
NM
C4654
NM
C4640
NM
L4601
ATL7022-A
12u
R4658
10
R4659
10
C4641
CCG1245-A-T
0.01u/630
C4642
CCG1245-A-T
0.01u/630
C4643
C4644
CCG1248-A
2200p
C4645
2200p
C4646
2200p
KN4300
VNE1948-A
SPEAKER TERMINAL
JA4501
AWH7017
AKE7136-A
*JA4501
SBR+
SBR-
SBL+
SBL-
(SB)
V+12RY
D4510
1SS352
D4610
1SS352
RY4500
ASR7001-A
RYB
Q4512
RT1N140M
V-12RY
D4503
RF051VA2S
R4545
10k
1%
D4504
RF051VA2S
D4507
RF051VA2S
IC4501
ICC3-AVR
DRIVER
R4546
39k
R4547
ACN7165-A
L4504
ATL7020-A
4.7u
VSS+10V
C4555
4.7u/25
SYB
C4531 QYB
0.22u/25
C4532 QYB
0.22u/25
Q4502
2SC5738
Q4503
2SA2061
Q4504
2SC5738
Q4505
2SA2061
R4548
ACN7165-A
D4501
RB161VA-20
R4549
ACN7165-A
D4502
RB161VA-20
Q4500
PHB45NQ15T
Q4501
PHB45NQ15T
D4505
D4506
RF051VA2S
R4550
10k
1%
PWM6
R4551
10
ACN7162-A
R4552
10
ACN7162-A
C4533
330p
ACG7064-A
C4534
ACG7063-A
220p
C4535
C4536
C4537
C4538
R4553
330k
L4500
ATL7017-A
15u
C4500
0.1u/100
C4501
0.27u/100
C4502
NM
OUT6
DC_DETECT2
D4508
RF101L2S
D4509
RF101L2S
R4557
15k
R4555
15k
1%
ZOBEL6
R4554
10 Ω /5W
ACN7161-A
R4556
1.8k
1%
OUT6_L
C4539
NM
C4554
NM
C4540
NM
L4501
ATL7022-A
12u
R4558
10
R4559
10
C4541
CCG1245-A-T
0.01u/630
C4542
CCG1245-A-T
0.01u/630
C4543
C4544
CCG1248-A
2200p
C4545
2200p
C4546
2200p
R4665
CCX1058-A
C4651
1u/16
YB
R4668
22k
1%
+54V
R4666
10k
1%
R4667
1k
1%
Q4610
2SA1514K(RS)
C4652
0.1u/16
YB
R4669
12k
1%
R4670
1k
C4653
0.1u/16
C4658
0.1u/16
YB
V+5V
R4675
10
IC4604
NJM12904V
Q4611
2SA1602A(EF)
TEMP_OUT
R4565
CCX1058-A
C4551
1u/16
YB
R4568
22k
1%
R4566
10k
1%
R4567
1k
1%
Q4510
2SA1514K(RS)
R4570
1k
C4552
0.1u/16
YB
R4569
12k
1%
C4553
0.1u/16
YB
IC4604
NJM12904V
Q4511
2SA1602A(EF)
GND

(SB): Audio Signal Route (Surround Back L ch)

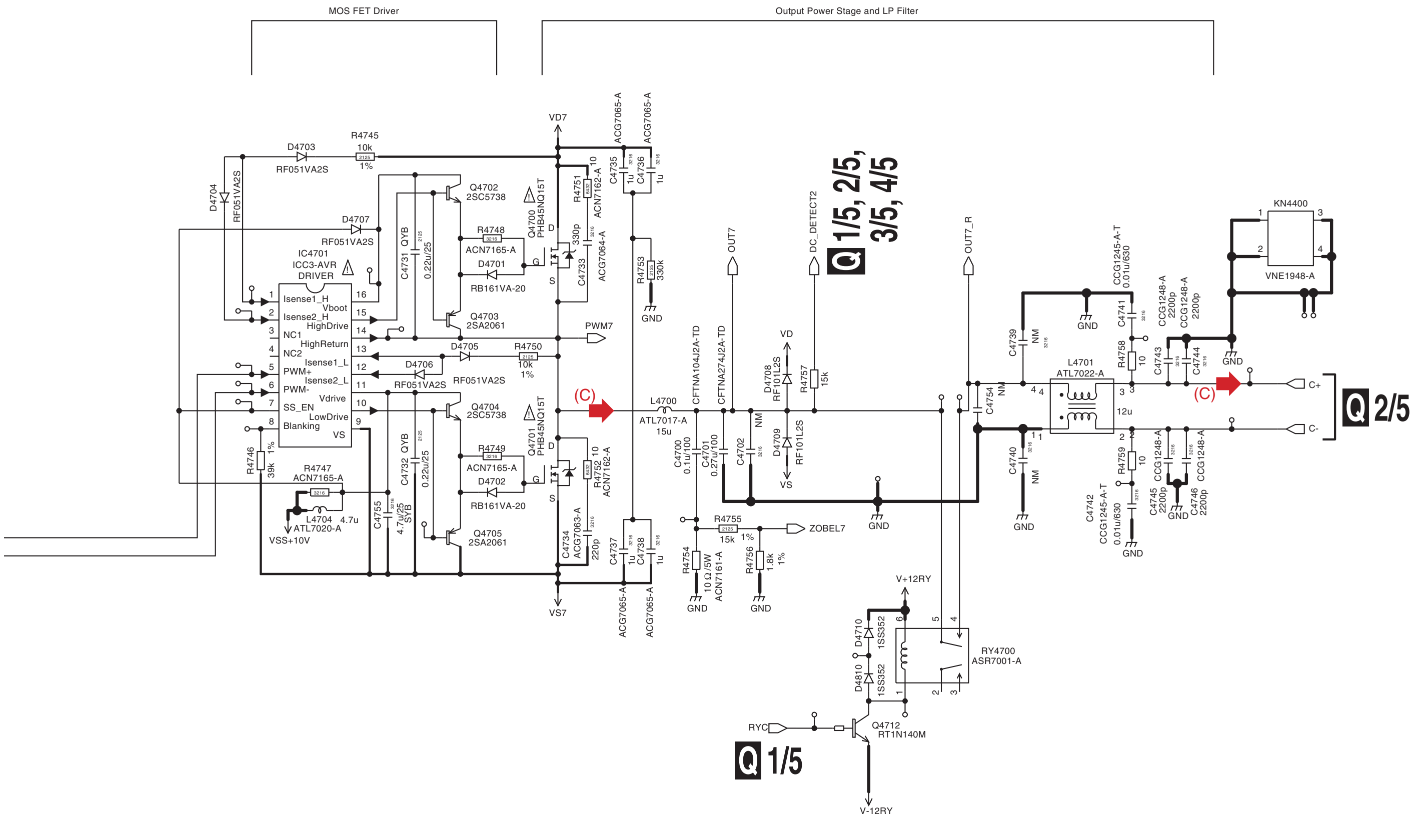
10.25 ICEPOWER AMP (5/5)

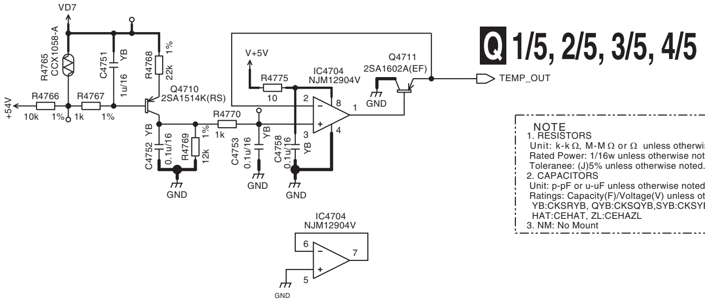


CN4700
XKP3062-A
P CN3810
C+
C-
GNDC
V+12C
V-12C
V+12V
V-12V
GND
D4700
1SS302
V-5V
V+5V
R4700 100 0.5%
R4701 100 0.5%
C4710 NM
C4711 NM
C4704 ACG7069-A 1000p
C4705 ACG7069-A 1000p
(C)
R4702 910 0.5%
R4703 910 0.5%
R4708 NM
C4706 ACG7072-A 470p
R4704 1k 0.5%
R4705 1k 0.5%
C4707 470p ACG7072-A
C4708 220u/25 HAT
C4709 0.01u/16
CFHXSQ103J16-T
R4706 0
V-12V
IC4702 (1/2)
UPC4570G2-A
C_IN
C4809 CFHXSQ103J16-T 0.01u/16
R4806 0
V+12V
C4808 220u/25 HAT
IC4702 (2/2)
UPC4570G2-A
Q 1/5, 2/5, 3/5, 4/5
R4740 10k
R4743 1k
C4730 1u/10 YB
R4729 1/8W
OUT7_R
R4730 47k 1% 1/8W
OUT7
D4711 NM
R4742 0
OSC1
R4741 15k
Q4709 2SC4154(EFG)
C4729 0.1u/16 YB
DC offset
C4720 1u/10 YB
R4718 4.7k
IC4703 (2/2) NJM4565MD
R4720 220k
R4722 240k
R4719 1M
MOD7
R4721 1.8k
C4721 0.1u/16 YB
C4719 0.47u/16 QYB
R4717 100k
R4776 1.8k 1%
R4731 68k 1% 1/8W
R4732 18k 1%
C4723 39p ACG7066-A
C4724 56p ACG7078-A
R4728 27k 1%
R4733 1.8k 1%
R4735 1.8k 1%
R4736 15k 1%
R4737 27k 1% 1/4W
R4777 20k 1% 1/4W
PWM7
C4725 47p ACG7071-A
C4726 75p ACG7079-A
R4734 1.2k 1%
R4715 0
C4717 100u ACH1479-A
C4718 1u/10 YB
C4760 CH 1000p/50
C4817 100u ACH1479-A
C4818 1u/10 YB
C4860 CH 1000p/50
R4815 0
V-5VFILT4
C4722 2200p ACG7073-A
R4725 1k 1%
R4726 1.5k 1%
R4727 1.5k 1%
R4724 27k 1%
R4723 1k 1%
R4771 0
R4772 NM
C4715 1u/10
C4727 4.7P ACG7070-A
C4728 2.2u ACG7073-A
R4738 2.7k 1%
R4739 56k 1%
R4744 1k
V-5VFILT4
Q4706
Q4707
2SA1682(4)
(C)
Q 1/5, 2/5, 3/5
AMUTE
R4714 4.7k
C4716 1u/16 YB
Q4708 2SD2704K
R4711 220k
C4759 NM
R4712 22k
C4714 680p ACG7068-A-T YB
C_IN
R4710 470
C4712 100u ACH1479-A
C4713 100u ACH1479-A
R4713 NM
R4778 NM
IC4700
ICC1-AVR
MODULATOR
CS1_ch1
CS2_ch1
RECout_ch1
Vin__ch1
DC_FB_ch1
Vin_ch2
DC_FB_ch2
RECout_ch2
CS1_ch2
CS2_ch2
Ref_ch2
UVP_en
Vdd
NC
In_A_Ch1
Out_A_Ch1
In_B_Ch1
Out_B_Ch1
In_C_Ch1
Pwm+_ch1
Pwm-_ch1
Mod_ch1
ZobelSense1
NTC_in
Average1
Average2
ZobelSense2
Mod_Ch2
Pwm+_ch2
Pwm-_ch2
Vd_check
Vs_check
Discharge
OC_mon
Enable
Thermal
In_A_Ch2
Out_A_Ch2
In_B_Ch2
Out_B_Ch2
In_C_Ch2
2SA1682(4)
MOD7
ZOBEL7
C4748 1u/10 YB
R4774 1M
R4999 10k
R4998 10k
V-5VFILT4
Q 1/5, 2/5, 3/5, 4/5
VD_CHK4
VS_CHK4
AMPOVERLOAD
AMPDISABLE4
Q 1/5
R4773 100k
C4756 0.1u/16 YB
DC offset
C4747 1u/10 YB
R4760 10
IC4703 (1/2) NJM4565MD
R4860 10
C4847 1u/10 YB
V-5V
V+64V
VD
R4761 ACN7165-A 10
R4763 105k 1% 1/4W
VD_CHK4
C4757 YB 2200p/50
R4764 3.3k 1%
L4702 ATL7018-A 1u
VD7
C4749 560u ACH7304-A
L4703 ATL7018-A 1u
C4750 560u ACH7304-A
C4857 YB 2200p/50
R4864 3.3k 1%
R4762 ACN7165-A 10
VS7
VS_CHK4
R4863 105k 1% 1/4W
V-64V
Q 5/5

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

Q 5/5 ICEPOWER AMP ASSY (AWH7017)


MOS FET Driver
Output Power Stage and LP Filter
VD7
D4703
RF051VA2S
R4745
10k
1%
D4704
RF051VA2S
D4707
RF051VA2S
IC4701
ICC3-AVR
DRIVER
Isense1_H
Vboot
Isense2_H
HighDrive
NC1
HighReturn
NC2
Isense1_L
PWM+
Isense2_L
PWM-
Vdrive
SS_EN
LowDrive
Blanking
VS
R4746
39k
1%
R4747
ACN7165-A
L4704
ATL7020-A
4.7u
VSS+10V
C4755
4.7u/25
SYB
Q4702
2SC5738
C4731 QYB
0.22u/25
R4748
ACN7165-A
D4701
RB161VA-20
Q4703
2SA2061
Q4700
PHB45NQ15T
R4751
ACN7162-A
10
330p
C4733
ACG7064-A
C4735
1u
C4736
1u
ACG7065-A
ACG7065-A
R4753
330k
GND
PWM7
D4705
R4750
10k
1%
D4706
RF051VA2S
RF051VA2S
Q4704
2SC5738
C4732 QYB
0.22u/25
R4749
ACN7165-A
D4702
RB161VA-20
Q4705
2SA2061
Q4701
PHB45NQ15T
R4752
10
ACN7162-A
C4734
ACG7063-A
220p
C4737
1u
C4738
1u
ACG7065-A
ACG7065-A
VS7
(C)
L4700
ATL7017-A
15u
CFTNA104J2A-TD
CFTNA274J2A-TD
C4700
0.1u/100
C4701
0.27u/100
C4702
NM
OUT7
VD
D4708
RF101L2S
D4709
RF101L2S
VS
R4757
15k
DC_DETECT2
Q 1/5, 2/5, 3/5, 4/5
OUT7_R
R4755
15k
1%
ZOBEL7
R4754
10 Ω/5W
ACN7161-A
GND
R4756
1.8k
1%
GND
GND
C4754
NM
C4739
NM
C4740
NM
GND
L4701
ATL7022-A
12u
CCG1245-A-T
0.01u/630
C4741
GND
R4758
10
C4743
C4744
CCG1248-A
2200p
CCG1248-A
2200p
GND
KN4400
VNE1948-A
(C)
C+
C-
Q 2/5
R4759
10
C4742
CCG1245-A-T
0.01u/630
GND
C4745
2200p
CCG1248-A
C4746
2200p
CCG1248-A
GND
V+12RY
D4710
1SS352
D4810
1SS352
RY4700
ASR7001-A
RYC
Q4712
RT1N140M
Q 1/5
V-12RY


VD7
R4765
CCX1058-A
C4751
1u/16
YB
R4768
22k
1%
+54V
R4766
10k
1%
R4767
1k
1%
Q4710
2SA1514K(RS)
C4752 YB
0.1u/16
R4769
12k
1%
GND
R4770
1k
C4753
0.1u/16
YB
GND
C4758
0.1u/16
YB
GND
V+5V
R4775
10
IC4704
NJM12904V
GND
Q4711
2SA1602A(EF)
TEMP_OUT
Q 1/5, 2/5, 3/5, 4/5
IC4704
NJM12904V
GND

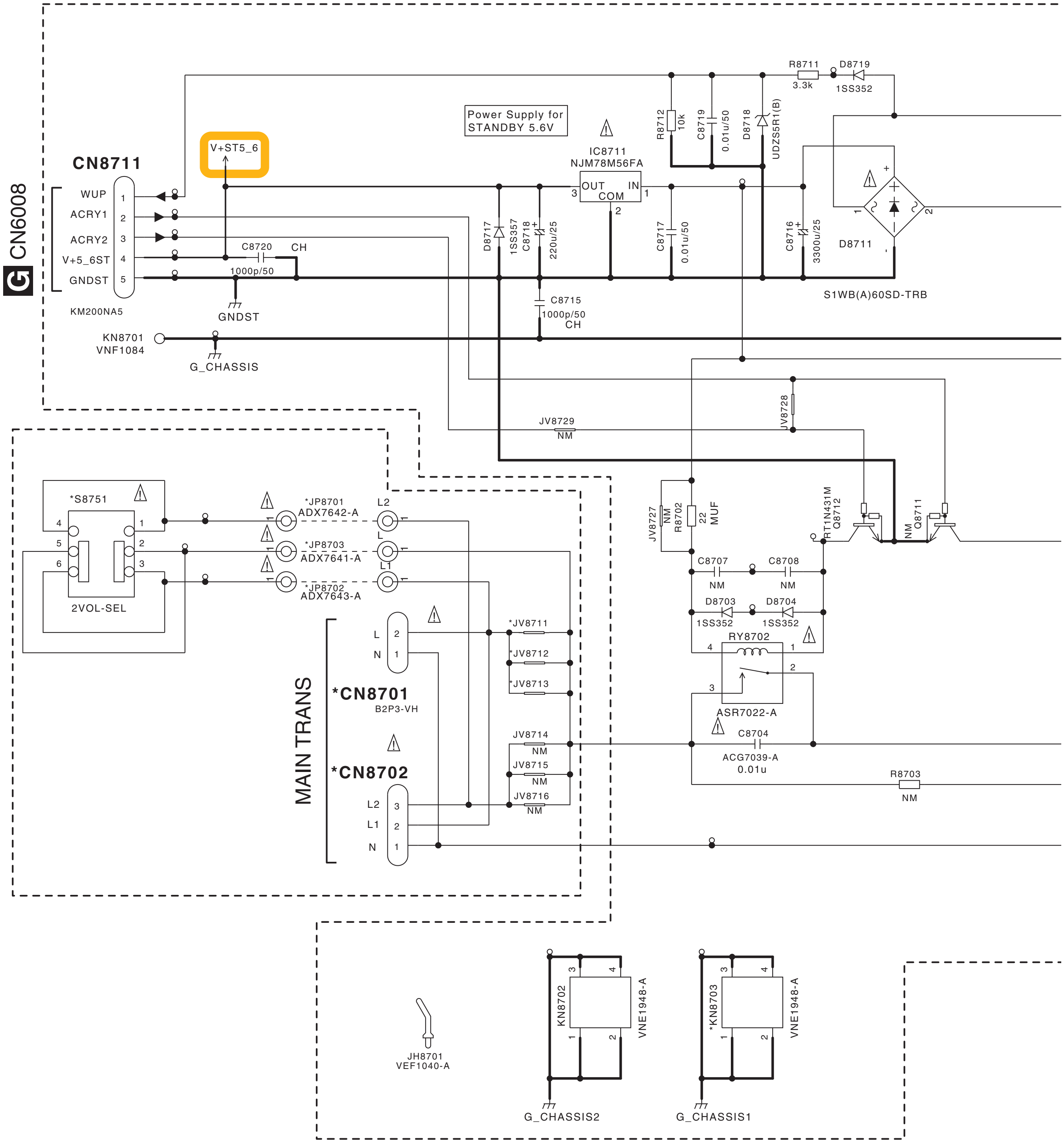
(C) : Audio Signal Route (Center)

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
YB:CKSRYB, QYB:CKSQYB,SYB:CKSYB, CH:CCSRCH
HAT:CEHAT, ZL:CEHAZL
3. NM: No Mount

1608 SIZE	2125 SIZE	3216 SIZE
RS1/16S*** RN1/16S***	RS1/10S*** RS1/8SQ*** 1/8W	RS1/8S*** RS1/4SA*** 1/4W
CCSR*** CKSR***	CCSQ*** CKSQ***	CCS*** CKS***

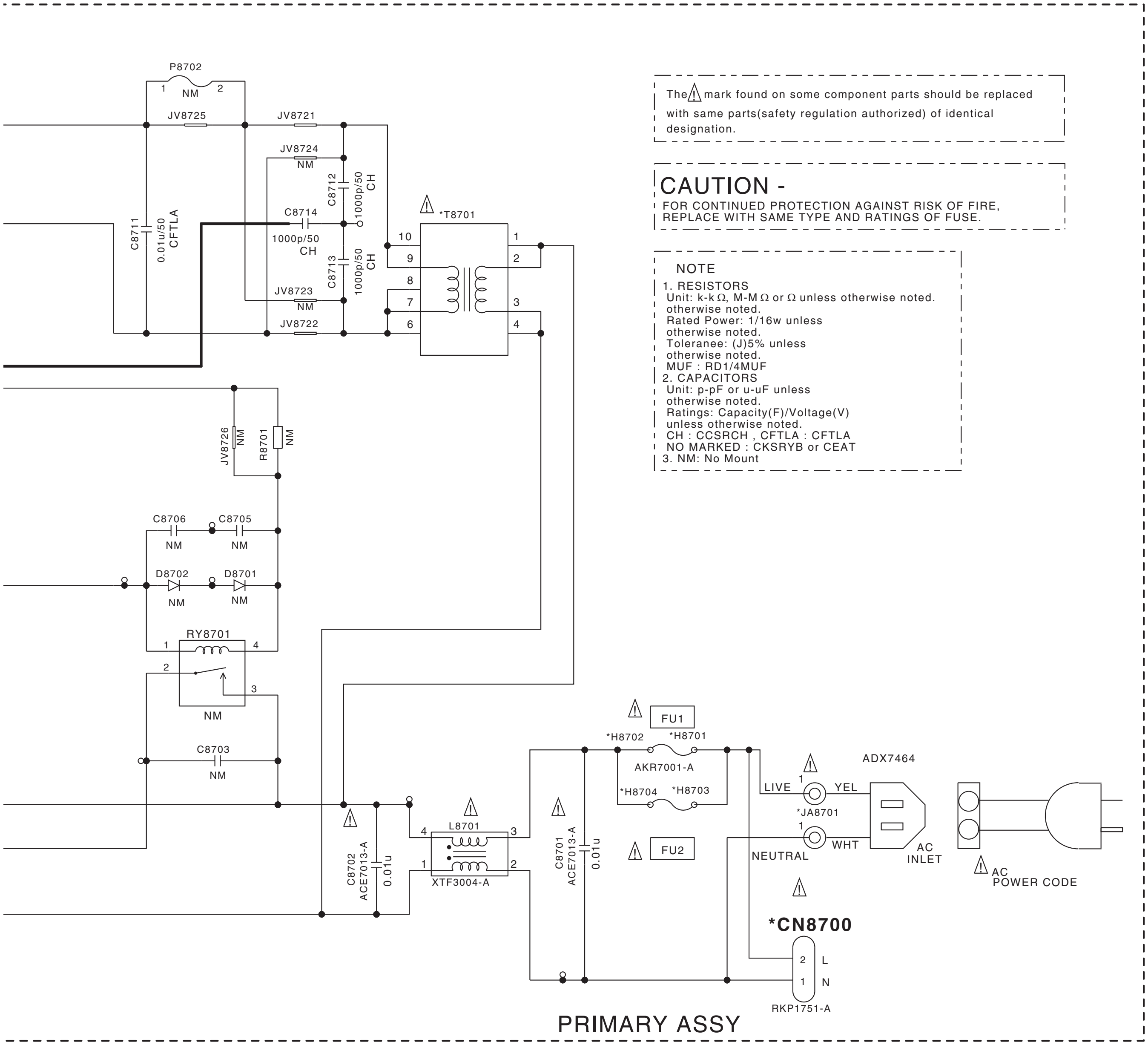
10.26 PRIMARY ASSY

	AWX9166
CN8701	NM
CN8702	B3P5-VH
JP8701	NM
JP8702	NM
JP8703	NM
JP8701_1	NM
JP8702_1	NM
JP8703_1	NM
JV8711	
JV8712	
JV8713	
S8751	NM


A
B
C
D
E
F
G CN6008
CN8711
WUP 1
ACRY1 2
ACRY2 3
V+5_6ST 4
GNDST 5
KM200NA5
V+ST5_6
C8720
CH
1000p/50
GNDST
KN8701
VNF1084
G_CHASSIS
Power Supply for STANDBY 5.6V
IC8711
NJM78M56FA
OUT IN
COM
3 1 2
D8717
1SS357
C8718
220u/25
C8715
1000p/50
CH
R8712
10k
C8719
0.01u/50
D8718
UDZS5R1(B)
C8717
0.01u/50
C8716
3300u/25
R8711
3.3k
D8719
1SS352
D8711
S1WB(A)60SD-TRB
JV8729
NM
JV8728
JV8727
NM
R8702
22
MUF
RT1N431M
Q8712
NM
Q8711
C8707
NM
C8708
NM
D8703
1SS352
D8704
1SS352
RY8702
ASR7022-A
C8704
ACG7039-A
0.01u
R8703
NM
*S8751
2VOL-SEL
*JP8701
ADX7642-A
*JP8703
ADX7641-A
*JP8702
ADX7643-A
L2
L
L1
MAIN TRANS
*CN8701
B2P3-VH
L 2
N 1
*JV8711
*JV8712
*JV8713
*CN8702
L2 3
L1 2
N 1
JV8714
NM
JV8715
NM
JV8716
NM
JH8701
VEF1040-A
KN8702
VNE1948-A
G_CHASSIS2
*KN8703
VNE1948-A
G_CHASSIS1

T PRIMARY ASSY (AWX9166)

	AWX9166
CN8700	NM
H8701	AKR7001-A
H8702	AKR7001-A
H8703	NM
H8704	NM
JA8701	ADX7464-A
JA8701_1	ADX7464-A_1
KN8703	VNE1948-A
T8701	ATT7040-A

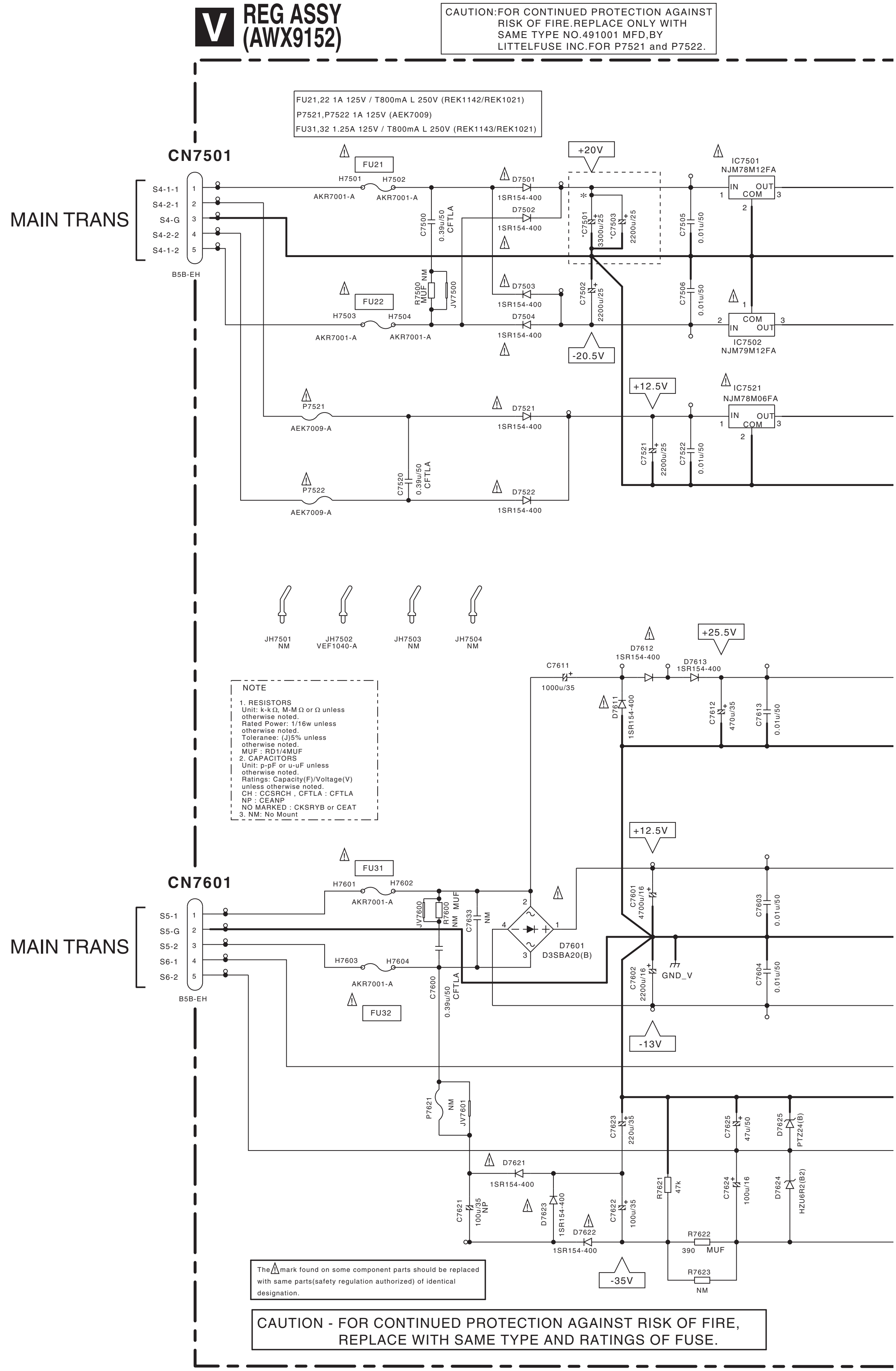

P8702
1
NM
2
JV8725
JV8721
JV8724
NM
C8712
1000p/50
CH
C8711
0.01u/50
CFTLA
C8714
1000p/50
CH
C8713
1000p/50
CH
JV8723
NM
JV8722
*T8701
10
9
8
7
6
1
2
3
4
JV8726
NM
R8701
NM
C8706
NM
C8705
NM
D8702
NM
D8701
NM
RY8701
1
4
2
3
NM
C8703
NM
C8702
ACE7013-A
0.01u
L8701
4
3
1
2
XTF3004-A
C8701
ACE7013-A
0.01u
FU1
*H8702
*H8701
AKR7001-A
*H8704
*H8703
FU2
ADX7464
LIVE
1
YEL
*JA8701
1
WHT
NEUTRAL
AC
INLET
AC
POWER CODE
*CN8700
2
L
1
N
RKP1751-A
PRIMARY ASSY

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

CAUTION -
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted. otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
MUF : RD1/4MUF
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH , CFTLA : CFTLA
NO MARKED : CKSRYB or CEAT
3. NM: No Mount

10.27 REG ASSY


V
REG ASSY
(AWX9152)
CN7501
MAIN TRANS
S4-1-1
S4-2-1
S4-G
S4-2-2
S4-1-2
B5B-EH
FU21
H7501
H7502
AKR7001-A
C7500
0.39u/50
CFTLA
R7500
MUF
NM
JV7500
FU22
H7503
H7504
D7501
D7502
D7503
D7504
1SR154-400
+20V
*C7501
3300u/25
*C7503
2200u/25
C7502
2200u/25
-20.5V
C7505
0.01u/50
C7506
0.01u/50
IC7501
NJM78M12FA
IN
OUT
COM
IC7502
NJM79M12FA
+12.5V
IC7521
NJM78M06FA
P7521
P7522
AEK7009-A
C7520
0.39u/50
CFTLA
D7521
D7522
C7521
2200u/25
C7522
0.01u/50
JH7501
NM
JH7502
VEF1040-A
JH7503
NM
JH7504
NM
+25.5V
C7611
1000u/35
D7611
D7612
D7613
1SR154-400
C7612
470u/35
C7613
0.01u/50
CN7601
S5-1
S5-G
S5-2
S6-1
S6-2
B5B-EH
FU31
H7601
H7602
JV7600
R7600
NM
MUF
C7633
NM
H7603
H7604
AKR7001-A
FU32
C7600
0.39u/50
CFTLA
D7601
D3SBA20(B)
+12.5V
C7601
4700u/16
C7602
2200u/16
GND_V
C7603
0.01u/50
C7604
0.01u/50
-13V
P7621
NM
JV7601
D7621
1SR154-400
C7621
100u/35
NP
D7623
1SR154-400
D7622
1SR154-400
C7622
100u/35
C7623
220u/35
-35V
R7621
47k
R7622
390
MUF
R7623
NM
C7625
47u/50
C7624
100u/16
D7625
PTZ24(B)
D7624
HZU6R2(B2)

CAUTION:FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.REPLACE ONLY WITH SAME TYPE NO.491001 MFD,BY LITTELFUSE INC.FOR P7521 and P7522.

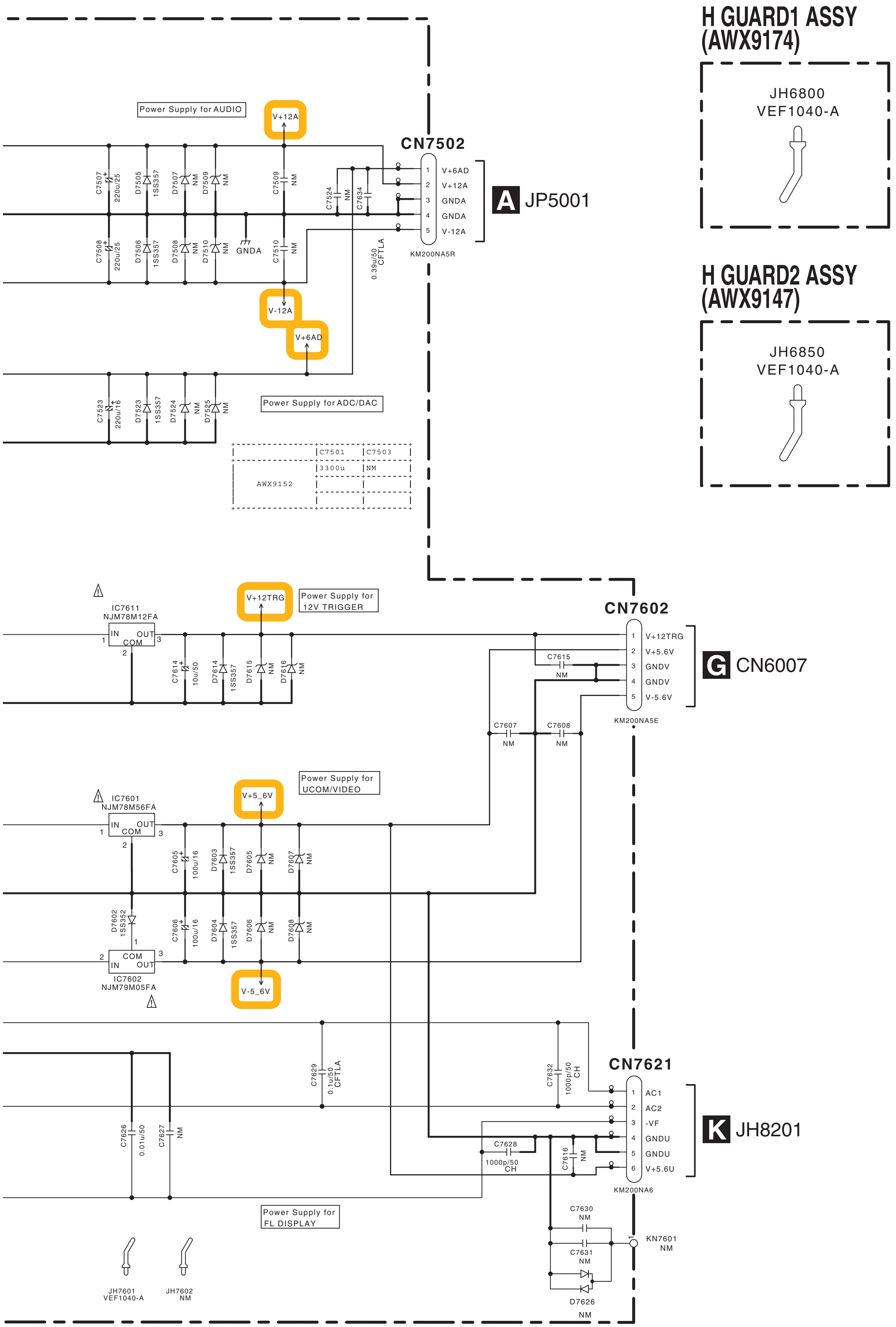
FU21,22 1A 125V / T800mA L 250V (REK1142/REK1021)
P7521,P7522 1A 125V (AEK7009)
FU31,32 1.25A 125V / T800mA L 250V (REK1143/REK1021)

NOTE

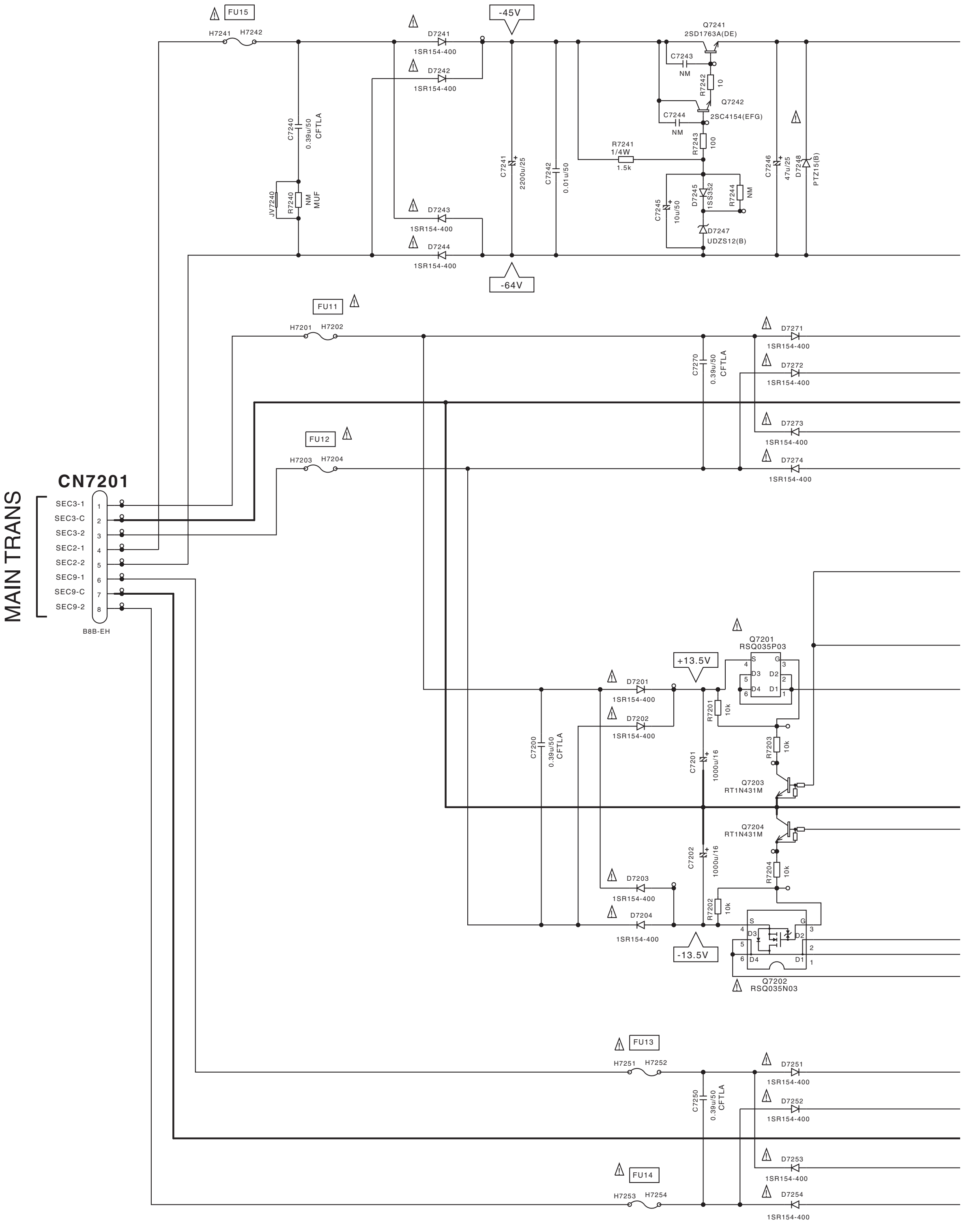
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
MUF : RD1/4MUF
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
CH : CCSRCH , CFTLA : CFTLA
NP : CEANP
NO MARKED : CKSRYB or CEAT
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

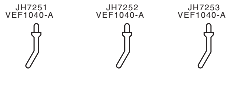

H GUARD1 ASSY
(AWX9174)
JH6800
VEF1040-A
H GUARD2 ASSY
(AWX9147)
JH6850
VEF1040-A
Power Supply for AUDIO
V+12A
CN7502
1 V+6AD
2 V+12A
3 GNDA
4 GNDA
5 V-12A
KM200NA5R
A JP5001
C7507 220u/25
D7505 1SS357
D7507 NM
D7509 NM
C7509 NM
C7524 NM
C7634
0.39u/50 CFTLA
C7508 220u/25
D7506 1SS357
D7508 NM
D7510 NM
GNDA
C7510 NM
V-12A
V+6AD
C7523 220u/16
D7523 1SS357
D7524 NM
D7525 NM
Power Supply for ADC/DAC
C7501
C7503
3300u
NM
AWX9152
IC7611
NJM78M12FA
IN OUT COM
V+12TRG
Power Supply for 12V TRIGGER
C7614 10u/50
D7614 1SS357
D7615 NM
D7616 NM
CN7602
1 V+12TRG
2 V+5.6V
3 GNDV
4 GNDV
5 V-5.6V
KM200NA5E
C7615 NM
C7607 NM
C7608 NM
G CN6007
IC7601
NJM78M56FA
V+5_6V
Power Supply for UCOM/VIDEO
C7605 100u/16
D7603 1SS357
D7605 NM
D7607 NM
D7602 1SS352
C7606 100u/16
D7604 1SS357
D7606 NM
D7608 NM
IC7602
NJM79M05FA
V-5_6V
C7629 0.1u/50 CFTLA
C7632 1000p/50 CH
CN7621
1 AC1
2 AC2
3 -VF
4 GNDU
5 GNDU
6 V+5.6U
KM200NA6
K JH8201
C7626 0.01u/50
C7627 NM
C7628 1000p/50 CH
C7616 NM
Power Supply for FL DISPLAY
C7630 NM
C7631 NM
D7626 NM
KN7601 NM
JH7601 VEF1040-A
JH7602 NM

10.28 ICE REG ASSY


FU15
H7241
H7242
D7241
1SR154-400
D7242
1SR154-400
-45V
Q7241
2SD1763A(DE)
C7243
NM
R7242
10
Q7242
2SC4154(EFG)
C7244
NM
R7243
100
R7241
1/4W
1.5k
C7240
0.39u/50
CFTLA
JV7240
R7240
NM
MUF
C7241
2200u/25
C7242
0.01u/50
D7245
1SS352
R7244
NM
C7245
10u/50
D7247
UDZS12(B)
C7246
47u/25
D7248
PTZ15(B)
D7243
1SR154-400
D7244
1SR154-400
-64V
FU11
H7201
H7202
D7271
1SR154-400
D7272
1SR154-400
C7270
0.39u/50
CFTLA
D7273
1SR154-400
FU12
H7203
H7204
D7274
1SR154-400
CN7201
MAIN TRANS
SEC3-1
SEC3-C
SEC3-2
SEC2-1
SEC2-2
SEC9-1
SEC9-C
SEC9-2
1
2
3
4
5
6
7
8
B8B-EH
Q7201
RSQ035P03
S
G
D3
D2
D4
D1
4
3
5
2
6
1
+13.5V
D7201
1SR154-400
D7202
1SR154-400
R7201
10k
R7203
10k
C7200
0.39u/50
CFTLA
C7201
1000u/16
Q7203
RT1N431M
Q7204
RT1N431M
C7202
1000u/16
R7204
10k
D7203
1SR154-400
D7204
1SR154-400
R7202
10k
-13.5V
S
G
D3
D2
D4
D1
4
3
5
2
6
1
Q7202
RSQ035N03
FU13
H7251
H7252
D7251
1SR154-400
C7250
0.39u/50
CFTLA
D7252
1SR154-400
D7253
1SR154-400
FU14
H7253
H7254
D7254
1SR154-400

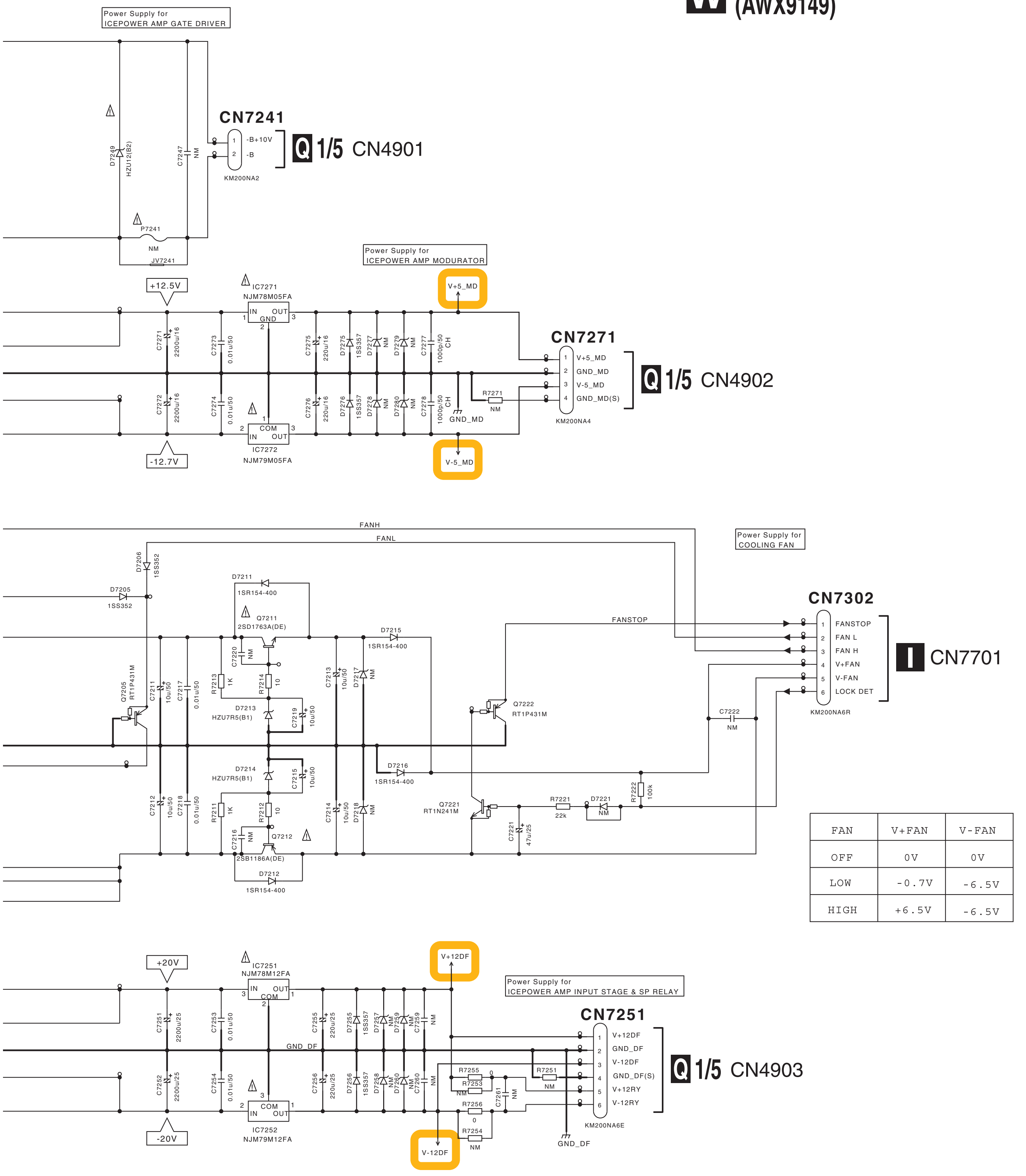
NOTE

1. RESISTORS
 Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
 Rated Power: 1/16w unless otherwise noted.
 Toleranee: (J)5% unless otherwise noted.
 MUF : RD1/4MUF
2. CAPACITORS
 Unit: p-pF or u-uF unless otherwise noted.
 Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
 CH : CCSRCH , CFTLA : CFTLA
 NO MARKED : CKSRYB or CEAT
3. NM: No Mount


JH7251
VEF1040-A
JH7252
VEF1040-A
JH7253
VEF1040-A

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

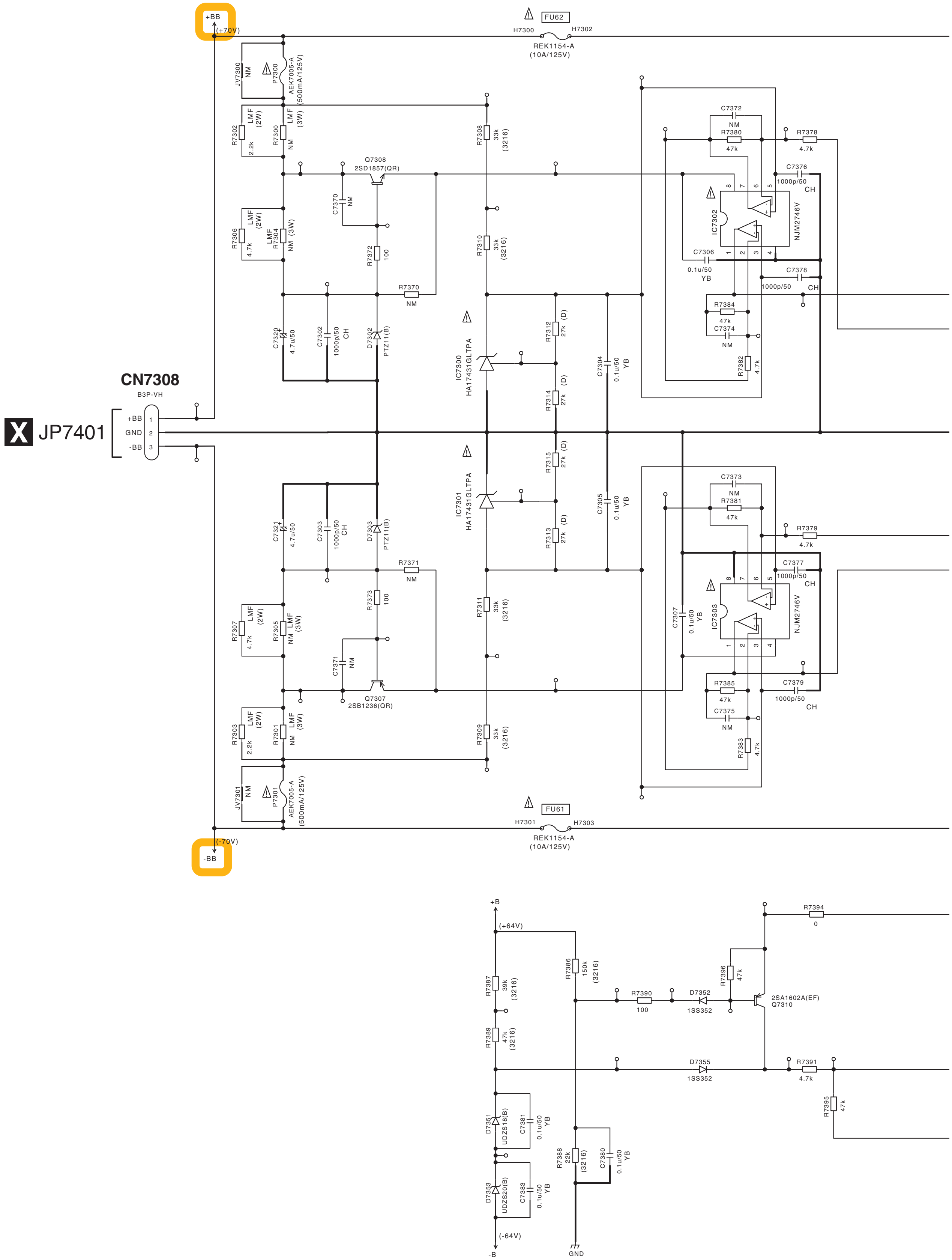
W ICE REG ASSY (AWX9149)


A
B
C
D
E
F
Power Supply for ICEPOWER AMP GATE DRIVER
D7249
HZU12(B2)
C7247
NM
P7241
NM
JV7241
CN7241
1 -B+10V
2 -B
KM200NA2
Q 1/5 CN4901
Power Supply for ICEPOWER AMP MODURATOR
+12.5V
IC7271
NJM78M05FA
IN OUT GND
V+5_MD
C7271 2200u/16
C7273 0.01u/50
C7275 220u/16
D7275 1SS357
D7277 NM
D7279 NM
C7277 1000p/50 CH
CN7271
1 V+5_MD
2 GND_MD
3 V-5_MD
4 GND_MD(S)
KM200NA4
Q 1/5 CN4902
R7271 NM
GND_MD
C7272 2200u/16
C7274 0.01u/50
C7276 220u/16
D7276 1SS357
D7278 NM
D7280 NM
C7278 1000p/50 CH
COM IN OUT
IC7272
NJM79M05FA
-12.7V
V-5_MD
FANH
FANL
Power Supply for COOLING FAN
D7206 1SS352
D7205 1SS352
D7211 1SR154-400
Q7211 2SD1763A(DE)
D7215 1SR154-400
FANSTOP
CN7302
1 FANSTOP
2 FAN L
3 FAN H
4 V+FAN
5 V-FAN
6 LOCK DET
KM200NA6R
I CN7701
Q7205 RT1P431M
C7211 10u/50
C7217 0.01u/50
C7220 NM
R7213 1K
R7214 10
D7213 HZU7R5(B1)
C7219 10u/50
C7213 10u/50
D7217 NM
Q7222 RT1P431M
C7222 NM
D7216 1SR154-400
D7214 HZU7R5(B1)
C7215 10u/50
C7212 10u/50
C7218 0.01u/50
R7211 1K
R7212 10
C7216 NM
Q7212 2SB1186A(DE)
D7212 1SR154-400
C7214 10u/50
D7218 NM
Q7221 RT1N241M
R7221 22k
D7221 NM
R7222 100k
C7221 47u/25
+20V
IC7251
NJM78M12FA
IN OUT COM
V+12DF
Power Supply for ICEPOWER AMP INPUT STAGE & SP RELAY
C7251 2200u/25
C7253 0.01u/50
C7255 220u/25
D7255 1SS357
D7257 NM
D7259 NM
C7259 NM
GND_DF
CN7251
1 V+12DF
2 GND_DF
3 V-12DF
4 GND_DF(S)
5 V+12RY
6 V-12RY
KM200NA6E
Q 1/5 CN4903
R7255 0
R7253 NM
R7251 NM
R7256 0
C7261 NM
R7254 NM
C7252 2200u/25
C7254 0.01u/50
C7256 220u/25
D7256 1SS357
D7258 NM
D7260 NM
C7260 NM
COM IN OUT
IC7252
NJM79M12FA
-20V
V-12DF
GND_DF

FAN	V+FAN	V-FAN
OFF	0V	0V
LOW	-0.7V	-6.5V
HIGH	+6.5V	-6.5V

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

10.29 B REG ASSY


+BB
(+70V)
FU62
H7300
H7302
REK1154-A
(10A/125V)
JV7300
NM
P7300
AEK7005-A
(500mA/125V)
R7302
2.2k
LMF
(2W)
R7300
NM
LMF
(3W)
R7308
33k
(3216)
Q7308
2SD1857(QR)
C7370
NM
R7372
100
R7306
4.7k
R7304
R7310
R7370
C7320
4.7u/50
C7302
1000p/50
CH
D7302
PTZ11(B)
IC7300
HA17431GLTPA
R7312
27k
(D)
R7314
C7304
0.1u/50
YB
C7372
R7380
47k
R7378
4.7k
C7376
1000p/50
IC7302
NJM2746V
C7306
0.1u/50
YB
C7378
1000p/50
R7384
C7374
R7382
CN7308
B3P-VH
X
JP7401
+BB
GND
-BB
1
2
3
R7315
C7305
IC7301
HA17431GLTPA
R7313
C7321
C7303
D7303
R7371
R7373
R7311
C7371
Q7307
2SB1236(QR)
R7307
R7305
R7303
R7301
R7309
JV7301
P7301
C7373
R7381
R7379
C7377
C7307
IC7303
NJM2746V
R7385
C7379
C7375
R7383
FU61
H7301
H7303
(-70V)
-BB
+B
(+64V)
R7387
39k
R7389
47k
R7386
150k
R7390
100
D7352
1SS352
R7396
47k
Q7310
2SA1602A(EF)
R7394
0
D7355
1SS352
R7391
4.7k
R7395
47k
D7351
UDZS18(B)
C7381
D7353
UDZS20(B)
C7383
R7388
22k
C7380
(-64V)
-B
GND

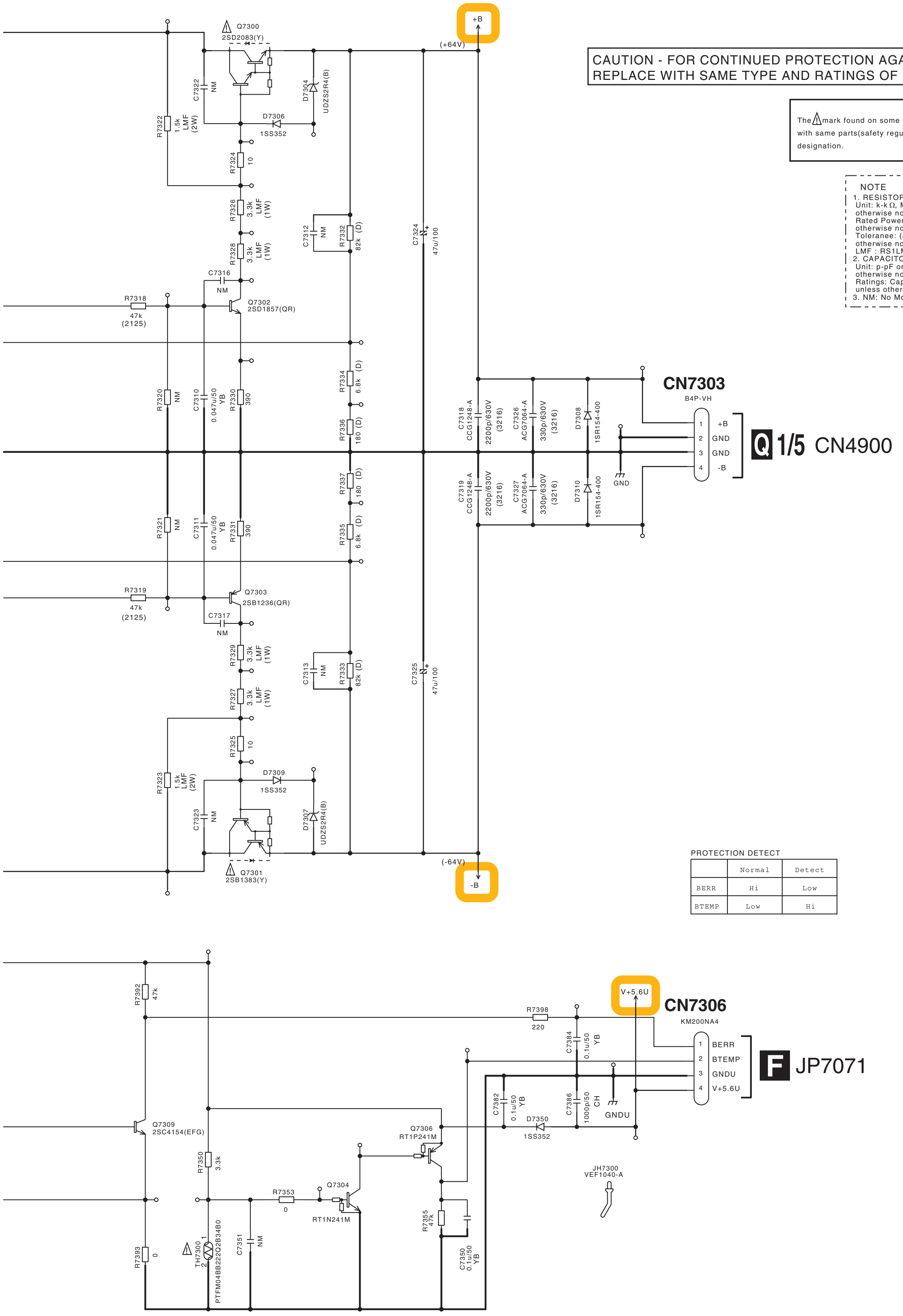
Y B REG ASSY (AWX9150)

CAUTION:FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.REPLACE ONLY WITH SAME TYPE NO.491,500 MFD,BY LITTELFUSE INC.FOR P7300 and P7301.

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

NOTE
1. RESISTORS
Unit: k-k Ω, M-M Ω or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Toleranee: (J)5% unless otherwise noted.
LMF : RS1LMF,RS2LMF,RS3LMF
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
3. NM: No Mount



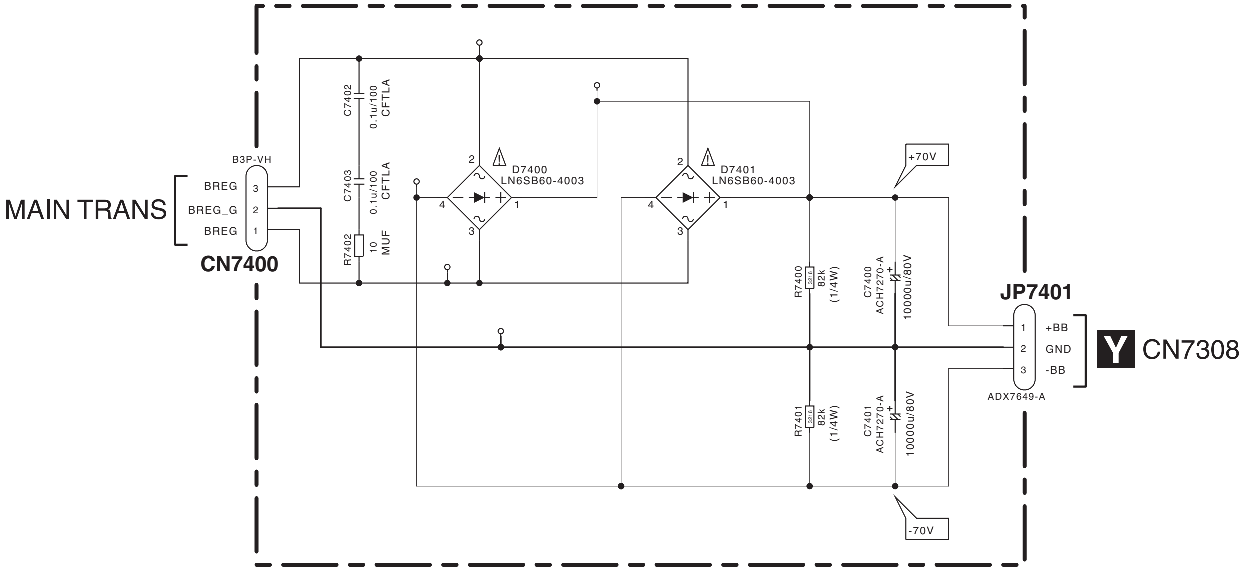
Q7300
2SD2083(Y)
+B
(+64V)
C7322 NM
R7322 1.5k LMF (2W)
D7304 UDZS2R4(B)
D7306 1SS352
R7324 10
R7326 3.3k LMF (1W)
R7328 3.3k LMF (1W)
C7312 NM
R7332 82k (D)
C7324 47u/100
C7316 NM
R7318 47k (2125)
Q7302 2SD1857(QR)
R7320 NM
C7310 0.047u/50 YB
R7330 390
R7334 6.8k (D)
R7336 180 (D)
C7318 CCG1248-A 2200p/630V (3216)
C7326 ACG7064-A 330p/630V (3216)
D7308 1SR154-400
CN7303
B4P-VH
1 +B
2 GND
3 GND
4 -B
GND
Q 1/5 CN4900
R7337 180 (D)
C7319 CCG1248-A 2200p/630V (3216)
C7327 ACG7064-A 330p/630V (3216)
D7310 1SR154-400
R7321 NM
C7311 0.047u/50 YB
R7331 390
R7335 6.8k (D)
R7319 47k (2125)
Q7303 2SB1236(QR)
C7317 NM
R7329 3.3k LMF (1W)
C7313 NM
R7333 82k (D)
C7325 47u/100
R7327 3.3k LMF (1W)
R7325 10
R7323 1.5k LMF (2W)
D7309 1SS352
C7323 NM
D7307 UDZS2R4(B)
Q7301 2SB1383(Y)
(-64V)
-B
R7392 47k
R7398 220
V+5.6U
CN7306
KM200NA4
1 BERR
2 BTEMP
3 GNDU
4 V+5.6U
F JP7071
C7384 0.1u/50 YB
C7382 0.1u/50 YB
C7386 1000p/50 CH
GNDU
D7350 1SS352
Q7306 RT1P241M
Q7309 2SC4154(EFG)
R7350 3.3k
R7353 0
Q7304 RT1N241M
R7355 47k
C7350 0.1u/50 YB
JH7300 VEF1040-A
R7393 0
TH7300 PTFM04BB222Q2B34B0
C7351 NM

PROTECTION DETECT

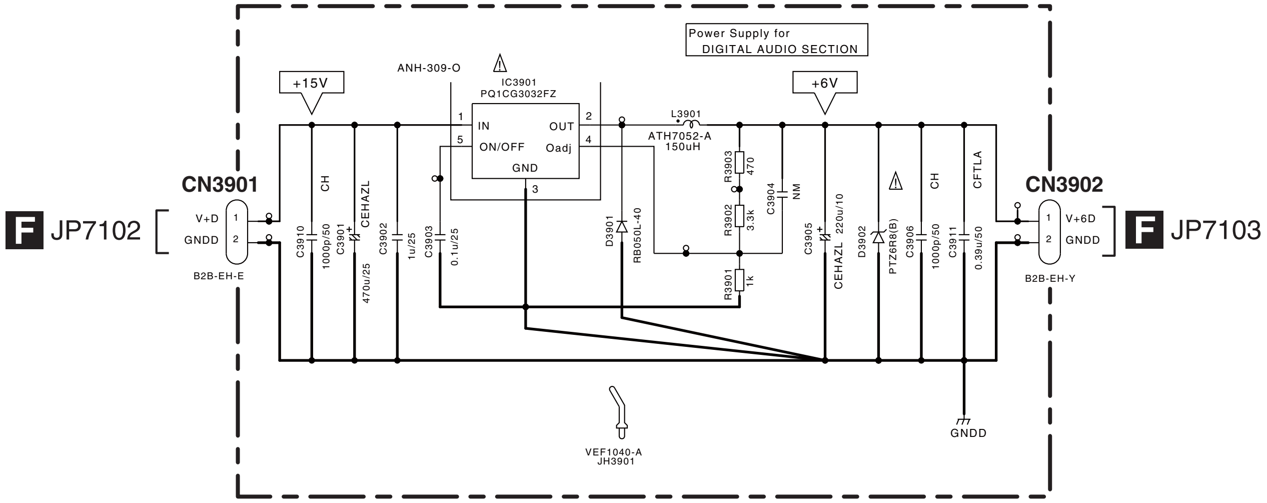
	Normal	Detect
BERR	Hi	Low
BTEMP	Low	Hi

10.30 B DIODE, DCDC, and HDMI RECT ASSYS

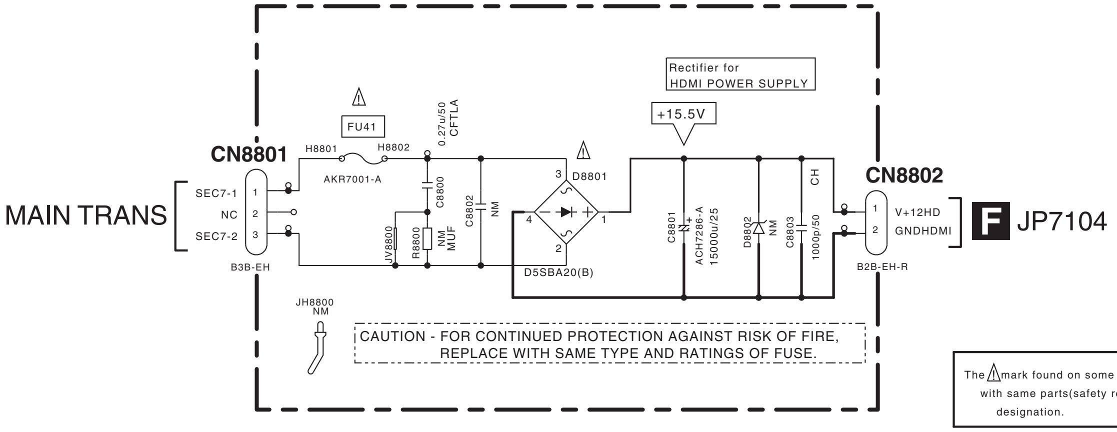
X B DIODE ASSY (AWX9171)


MAIN TRANS
BREG
BREG_G
BREG
B3P-VH
CN7400
C7402 0.1u/100 CFTLA
C7403 0.1u/100 CFTLA
R7402 10 MUF
D7400 LN6SB60-4003
D7401 LN6SB60-4003
+70V
R7400 82k (1/4W)
C7400 ACH7270-A 10000u/80V
R7401 82k (1/4W)
C7401 ACH7270-A 10000u/80V
-70V
JP7401
+BB
GND
-BB
ADX7649-A
Y CN7308

Z DCDC ASSY (AWX9138)


Power Supply for DIGITAL AUDIO SECTION
+15V
ANH-309-O
IC3901 PQ1CG3032FZ
IN
OUT
ON/OFF
Oadj
GND
L3901 ATH7052-A 150uH
+6V
CN3901
F JP7102
V+D
GNDD
B2B-EH-E
C3910 CH 1000p/50
C3901 CEHAZL 470u/25
C3902 1u/25
C3903 0.1u/25
D3901 RB050L-40
R3903 470
R3902 3.3k
R3901 1k
C3904 NM
C3905 CEHAZL 220u/10
D3902 PTZ6R8(B)
C3906 CH 1000p/50
C3911 CFTLA 0.39u/50
CN3902
V+6D
GNDD
B2B-EH-Y
F JP7103
VEF1040-A JH3901
GNDD

AA HDMI RECT ASSY (AWX9156)


MAIN TRANS
SEC7-1
NC
SEC7-2
B3B-EH
CN8801
FU41
H8801
H8802
AKR7001-A
0.27u/50 CFTLA
C8800
JV8800
R8800 NM MUF
C8802 NM
D8801
D5SBA20(B)
Rectifier for HDMI POWER SUPPLY
+15.5V
C8801 ACH7286-A 15000u/25
D8802 NM
C8803 CH 1000p/50
CN8802
V+12HD
GNDHDMI
B2B-EH-R
F JP7104
JH8800 NM

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

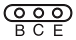
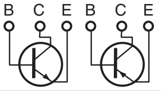
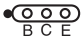
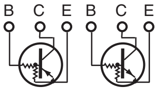
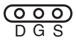
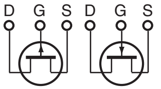
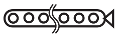
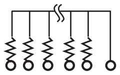
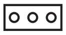
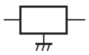
NOTE
1. RESISTORS
   Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
   Rated Power: 1/16w unless otherwise noted.
   Toleranee: (J)5% unless otherwise noted.
   MUF : RD1/4MUF
2. CAPACITORS
   Unit: p-pF or u-uF unless otherwise noted.
   Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
   CFTLA : CFTLA
3. NM: No Mount

The ⚠ mark found on some component parts should be replaced with same parts(safety regulation authorized) of identical designation.

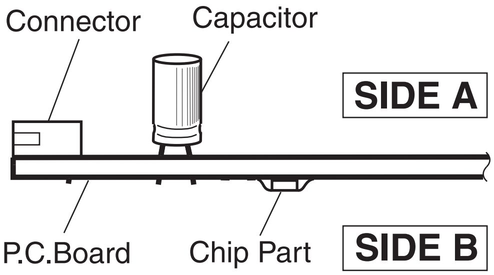
11. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

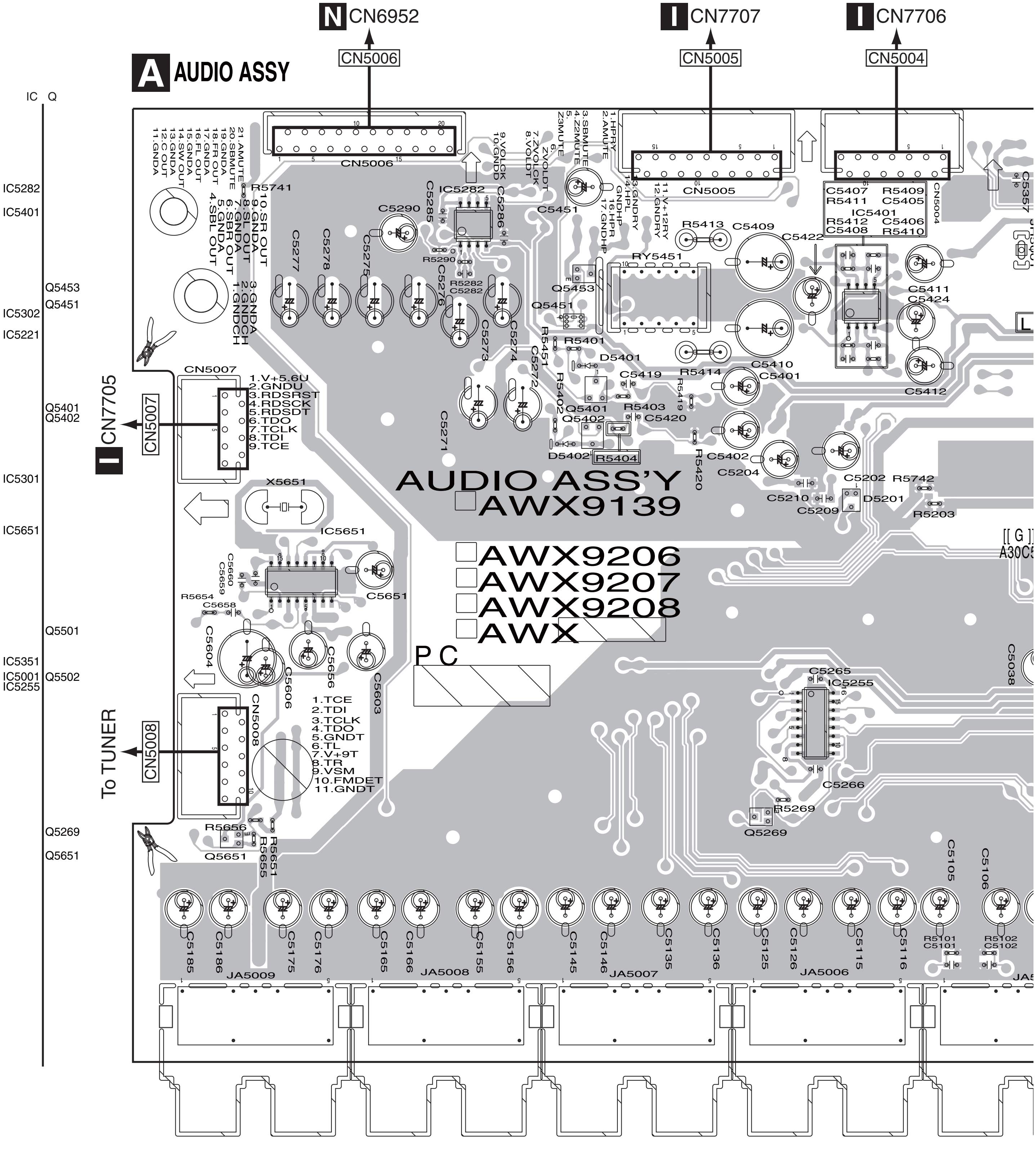
Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.


Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B

11.1 AUDIO ASSY

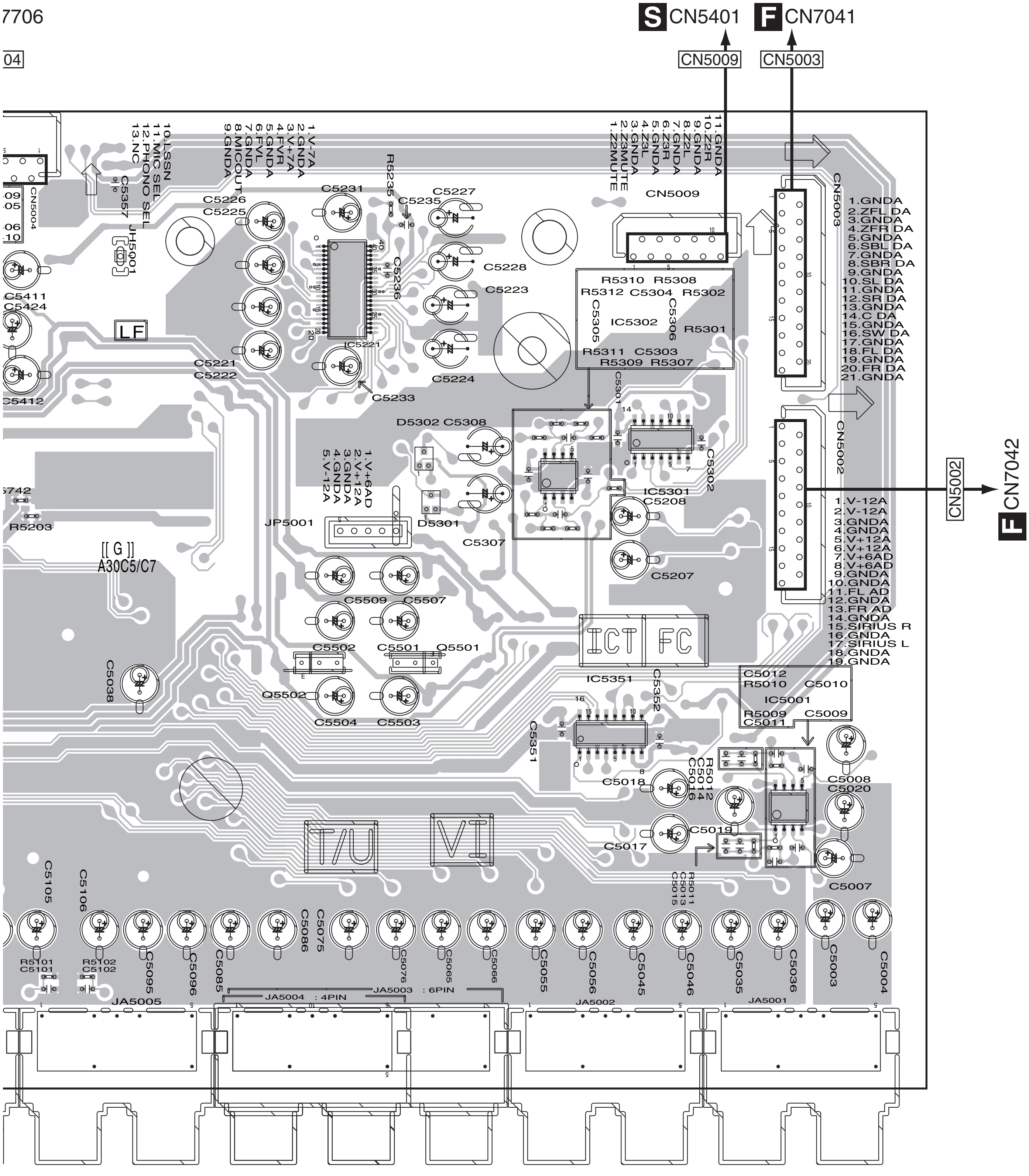
SIDE A


N CN6952
CN5006
I CN7707
CN5005
I CN7706
CN5004
A AUDIO ASSY
IC Q
IC5282
IC5401
Q5453
Q5451
IC5302
IC5221
Q5401
Q5402
IC5301
IC5651
Q5501
IC5351
IC5001
IC5255
Q5502
Q5269
Q5651
21.AMUTE
20.SBMUTE
19.GNDA
18.FR OUT
17.GNDA
16.FL OUT
15.GNDA
14.SW OUT
13.GNDA
12.C OUT
11.GNDA
10.SR OUT
9.GNDA
8.SL OUT
7.GNDA
6.SBR OUT
5.GNDA
4.SBL OUT
3.GNDA
2.GNDCH
1.GNDCH
9.VOLCK
10.GNDD
8.VOLDT
7.ZVOLCK
6.ZVOLDT
5.Z3MUTE
4.Z2MUTE
3.SBMUTE
2.AMUTE
1.HPRY
13.GNDRY
14.HPL
15.GNDHP
16.HPR
17.GNDHP
11.V+12RY
12.GNDRY
R5741
C5290
C5285
IC5282
C5286
C5451
C5277
C5278
C5275
C5276
R5290
R5282
C5282
C5273
C5274
C5272
C5271
R5451
R5402
Q5453
Q5451
RY5451
R5413
C5409
C5422
C5407
R5409
R5411
C5405
IC5401
R5412
C5406
C5408
R5410
C5411
C5424
C5412
C5357
R5401
D5401
C5419
R5414
C5410
C5401
R5419
Q5401
Q5402
R5403
C5420
D5402
R5404
R5420
C5402
C5204
C5202
R5742
C5210
D5201
C5209
R5203
CN5007
1.V+5.6U
2.GNDU
3.RDSRST
4.RDSCK
5.RDSDT
6.TDO
7.TCLK
8.TDI
9.TCE
I CN7705
CN5007
X5651
IC5651
C5660
C5659
R5654
C5658
C5651
C5604
C5656
C5606
C5603
CN5008
1.TCE
2.TDI
3.TCLK
4.TDO
5.GNDT
6.TL
7.V+9T
8.TR
9.VSM
10.FMDET
11.GNDT
To TUNER
CN5008
R5656
R5651
R5655
Q5651
AUDIO ASS'Y
AWX9139
AWX9206
AWX9207
AWX9208
AWX
P C
[[G]]
A30C5
C5265
IC5255
C5266
R5269
Q5269
C5038
C5105
C5106
C5185
C5186
C5175
C5176
C5165
C5166
C5155
C5156
C5145
C5146
C5135
C5136
C5125
C5126
C5115
C5116
R5101
C5101
R5102
C5102
JA5009
JA5008
JA5007
JA5006
JA5

SIDE A

7706

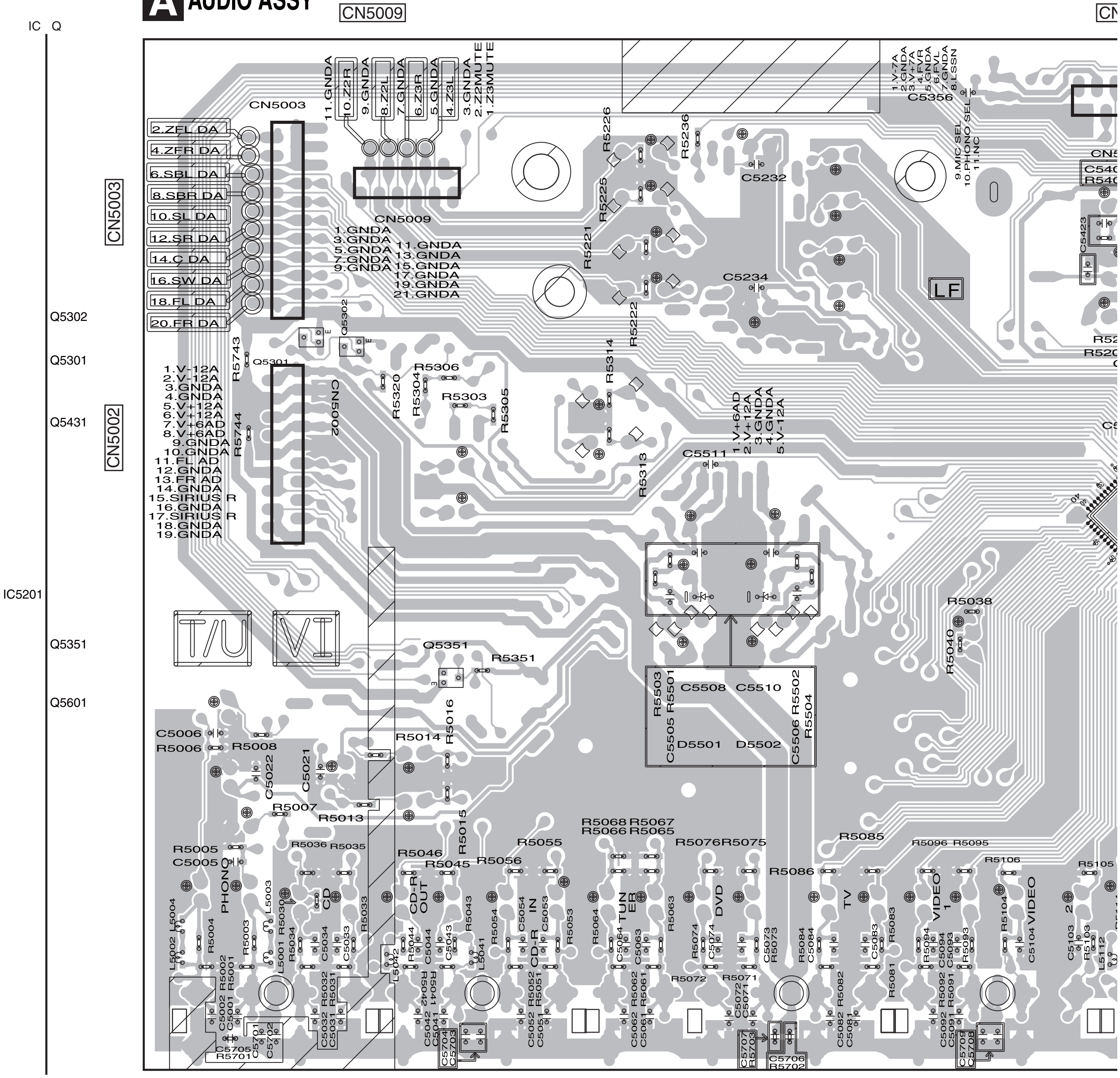
04


S CN5401
F CN7041
CN5009
CN5003
F CN7042
CN5002
CN5004
1.GNDA
2.ZFL DA
3.GNDA
4.ZFR DA
5.GNDA
6.SBL DA
7.GNDA
8.SBR DA
9.GNDA
10.SL DA
11.GNDA
12.SR DA
13.GNDA
14.C DA
15.GNDA
16.SW DA
17.GNDA
18.FL DA
19.GNDA
20.FR DA
21.GNDA
1.V-12A
2.V-12A
3.GNDA
4.GNDA
5.V+12A
6.V+12A
7.V+6AD
8.V+6AD
9.GNDA
10.GNDA
11.FL AD
12.GNDA
13.FR AD
14.GNDA
15.SIRIUS R
16.GNDA
17.SIRIUS L
18.GNDA
19.GNDA
1.Z2MUTE
2.Z3MUTE
3.GNDA
4.Z3L
5.GNDA
6.Z3R
7.GNDA
8.Z2L
9.GNDA
10.Z2R
11.GNDA
1.V-7A
2.GNDA
3.V+7A
4.FVR
5.GNDA
6.FVL
7.GNDA
8.MICOUT
9.GNDA
10.LSSN
11.MIC SEL
12.PHONO SEL
13.NC
1.V+6AD
2.V+12A
3.GNDA
4.GNDA
5.V-12A
JP5001
JH5001
LF
[[G]]
A30C5/C7
IC5221
IC5302
IC5301
IC5351
IC5001
ICT
FC
T/U
VI
R5235
R5310 R5308
R5312 C5304 R5302
R5301
R5311 C5303
R5309 R5307
R5203
R5010
R5009
R5012
R5011
R5101 C5101
R5102 C5102
D5302 C5308
D5301
Q5501
Q5502
C5231
C5227
C5235
C5226
C5225
C5236
C5228
C5223
C5221
C5222
C5224
C5233
C5357
C5411
C5424
C5412
C5742
C5305
C5306
C5301
C5302
C5208
C5207
C5307
C5509
C5507
C5502
C5501
C5504
C5503
C5038
C5352
C5351
C5012
C5010
C5011
C5009
C5008
C5020
C5018
C5014
C5016
C5019
C5017
C5013
C5015
C5007
C5105
C5106
C5086
C5075
C5095
C5096
C5085
C5076
C5065
C5066
C5055
C5056
C5045
C5046
C5035
C5036
C5003
C5004
JA5005
JA5004 : 4PIN
JA5003 : 6PIN
JA5002
JA5001

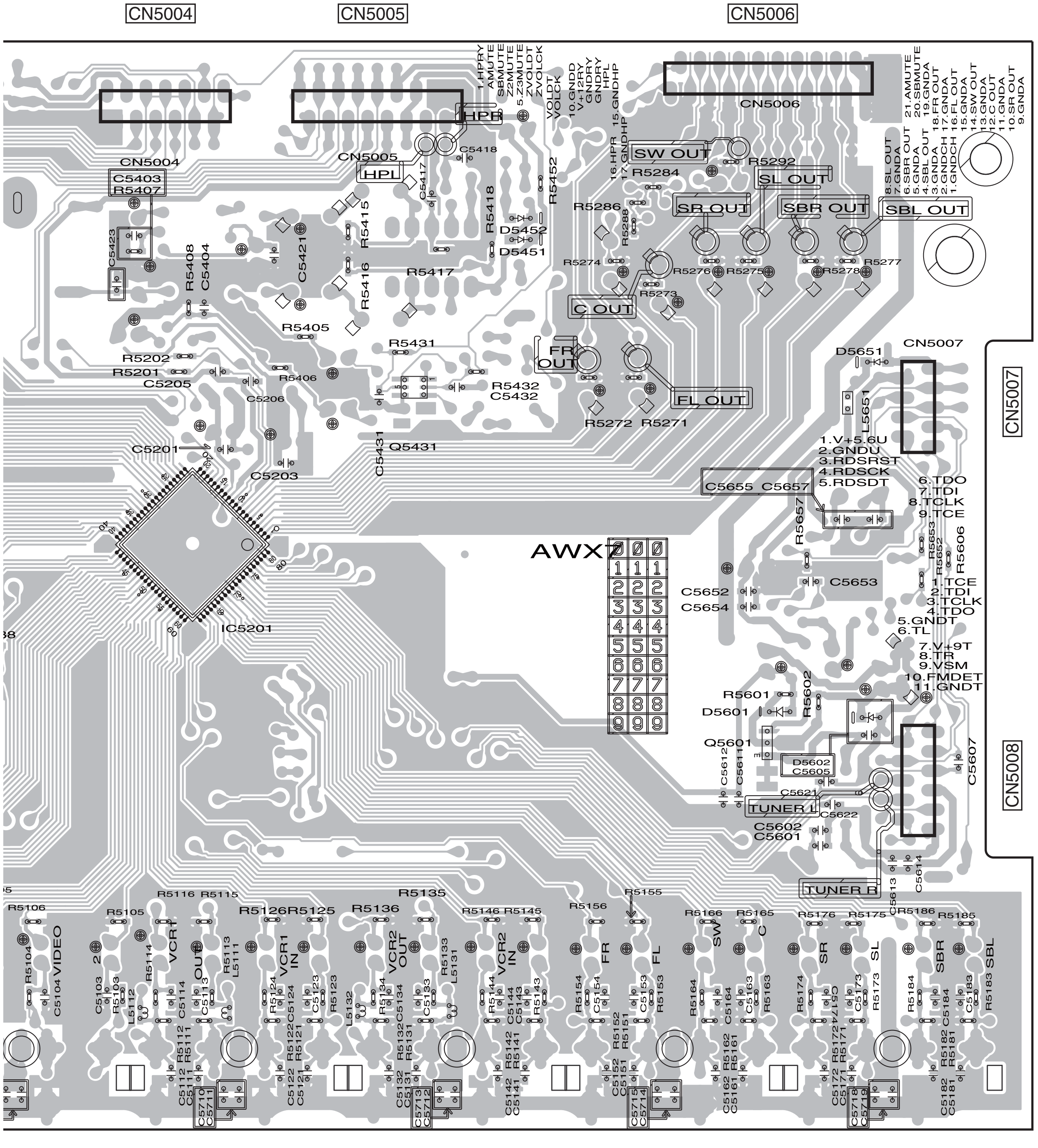
(ANP7650-D)

SIDE B

A AUDIO ASSY


CN5009
IC Q
Q5302
Q5301
Q5431
IC5201
Q5351
Q5601
CN5003
CN5002
2.ZFL DA
4.ZFR DA
6.SBL DA
8.SBR DA
10.SL DA
12.SR DA
14.C DA
16.SW DA
18.FL DA
20.FR DA
11.GNDA
10.Z2R
9.GNDA
8.Z2L
7.GNDA
6.Z3R
5.GNDA
4.Z3L
3.GNDA
2.Z2MUTE
1.Z3MUTE
1.GNDA
3.GNDA
5.GNDA
7.GNDA
9.GNDA
11.GNDA
13.GNDA
15.GNDA
17.GNDA
19.GNDA
21.GNDA
1.V-12A
2.V-12A
3.GNDA
4.GNDA
5.V+12A
6.V+12A
7.V+6AD
8.V+6AD
9.GNDA
10.GNDA
11.FL AD
12.GNDA
13.FR AD
14.GNDA
15.SIRIUS R
16.GNDA
17.SIRIUS R
18.GNDA
19.GNDA
1.V-7A
2.GNDA
3.V+7A
4.FVR
5.GNDA
6.FVL
7.GNDA
8.LSSN
9.MIC SEL
10.PHONO SEL
11.NC
C5356
1.V+6AD
2.V+12A
3.GNDA
4.GNDA
5.V-12A
R5226
R5236
R5225
R5221
R5222
R5314
R5313
C5232
C5234
C5511
C5423
LF
R5743
R5744
R5320
R5304
R5306
R5303
R5305
T/U
VI
Q5351
R5351
R5038
R5040
R5503
R5501
C5505
C5508
C5510
R5502
R5504
C5506
D5501
D5502
C5006
R5006
R5008
C5022
C5021
R5014
R5016
R5007
R5013
R5015
R5005
C5005
R5036
R5035
R5046
R5045
R5056
R5055
R5068
R5067
R5066
R5065
R5076
R5075
R5085
R5086
R5096
R5095
R5106
R5105
PHONO
CD
CD-R OUT
CD-R IN
TUNER
DVD
TV
VIDEO 1
VIDEO 2
L5002
L5004
R5004
R5003
L5003
R5030
R5034
L5001
R5002
R5001
C5002
C5001
C5034
C5033
R5033
R5032
R5031
C5032
C5031
L5042
R5044
C5044
C5043
R5043
L5041
R5042
R5041
C5042
C5041
R5054
C5054
C5053
R5053
R5052
R5051
C5052
C5051
R5064
C5064
C5063
R5063
R5062
R5061
C5062
C5061
R5074
C5074
R5072
R5071
C5073
R5073
C5072
C5071
R5084
C5084
R5082
C5082
C5081
R5081
C5083
R5083
R5094
C5094
C5093
R5093
R5092
R5091
C5092
C5091
R5104
C5104
C5103
R5103
L5112
C5701
C5702
C5705
R5701
C5704
C5703
C5707
R5703
C5706
R5702
C5709
C5708
CN5
C540
R540
R52
R520
40

SIDE B

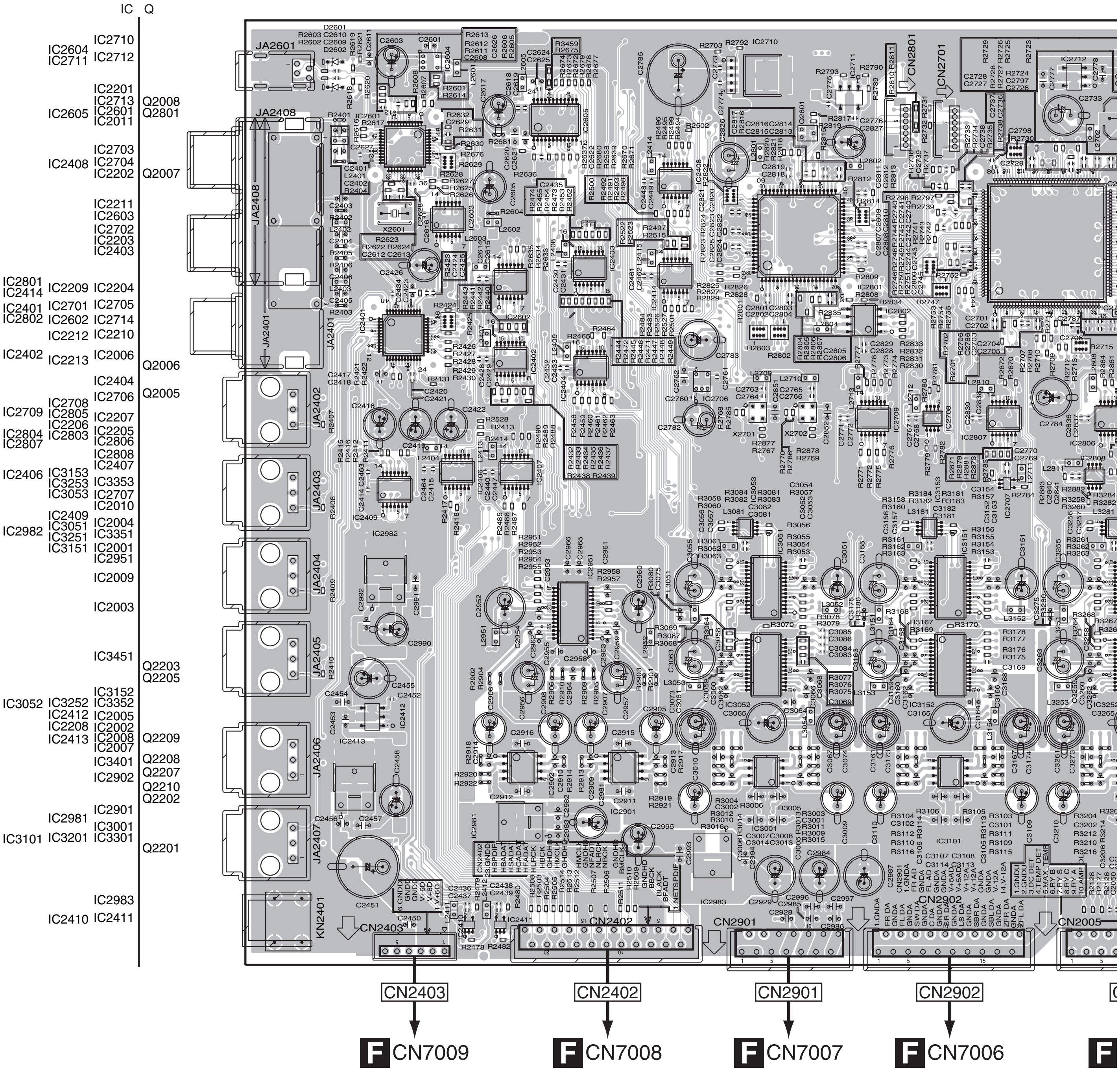

CN5004
CN5005
CN5006
CN5004
C5403
R5407
C5423
CN5005
HPR
HPL
C5418
C5417
1.HPRY
AMUTE
SBMUTE
Z2MUTE
5.Z3MUTE
ZVOLDT
ZVOLCK
VOLDT
VOLCK
10.GNDD
V+12RY
GNDRY
GNDHP
HPL
15.GNDHP
16.HPR
17.GNDHP
R5452
R5418
R5415
R5416
R5417
C5421
R5408
C5404
D5452
D5451
R5405
R5431
R5432
C5432
R5406
C5206
R5202
R5201
C5205
C5201
C5203
C5431
Q5431
IC5201
CN5006
SW OUT
R5292
R5284
SL OUT
R5286
R5288
SR OUT
SBR OUT
SBL OUT
R5274
R5276
R5275
R5278
R5277
R5273
C OUT
FR OUT
FL OUT
R5272
R5271
21.AMUTE
20.SBMUTE
19.GNDA
18.FR OUT
17.GNDA
16.FL OUT
15.GNDA
14.SW OUT
13.GNDA
12.C OUT
11.GNDA
10.SR OUT
9.GNDA
8.SL OUT
7.GNDA
6.SBR OUT
5.GNDA
4.SBL OUT
3.GNDA
2.GNDCH
1.GNDCH
CN5007
D5651
L5651
1.V+5.6U
2.GNDU
3.RDSRST
4.RDSCK
5.RDSDT
6.TDO
7.TDI
8.TCLK
9.TCE
C5655
C5657
R5657
R5653
R5652
R5606
C5653
C5652
C5654
1.TCE
2.TDI
3.TCLK
4.TDO
5.GNDT
6.TL
7.V+9T
8.TR
9.VSM
10.FMDET
11.GNDT
AWX7
0 0 0
1 1 1
2 2 2
3 3 3
4 4 4
5 5 5
6 6 6
7 7 7
8 8 8
9 9 9
R5601
D5601
R5602
Q5601
C5612
C5611
D5602
C5605
C5621
C5622
TUNER L
C5602
C5601
C5607
CN5008
C5613
C5614
TUNER R
R5106
R5105
R5116
R5115
R5126
R5125
R5136
R5135
R5146
R5145
R5156
R5155
R5166
R5165
R5176
R5175
R5186
R5185
R5104
VIDEO
C5104
C5103
R5103
L5112
R5114
VCR1
OUT
C5114
C5113
R5113
L5111
R5124
VCR1
IN
C5124
C5123
R5123
L5132
R5134
VCR2
OUT
C5134
C5133
R5133
L5131
R5144
VCR2
IN
C5144
C5143
R5143
R5154
FR
C5154
C5153
FL
R5153
R5164
SW
C5164
C5163
C
R5163
R5174
SR
C5174
C5173
SL
R5173
R5184
SBR
C5184
C5183
SBL
R5183
C5112
R5112
C5111
R5111
C5122
R5122
C5121
R5121
C5132
R5132
C5131
R5131
C5142
R5142
C5141
R5141
C5152
R5152
C5151
R5151
C5162
R5162
C5161
R5161
C5172
R5172
C5171
R5171
C5182
R5182
C5181
R5181
C5710
C5711
C5713
C5712
C5715
C5714
C5718
C5719

(ANP7650-D)

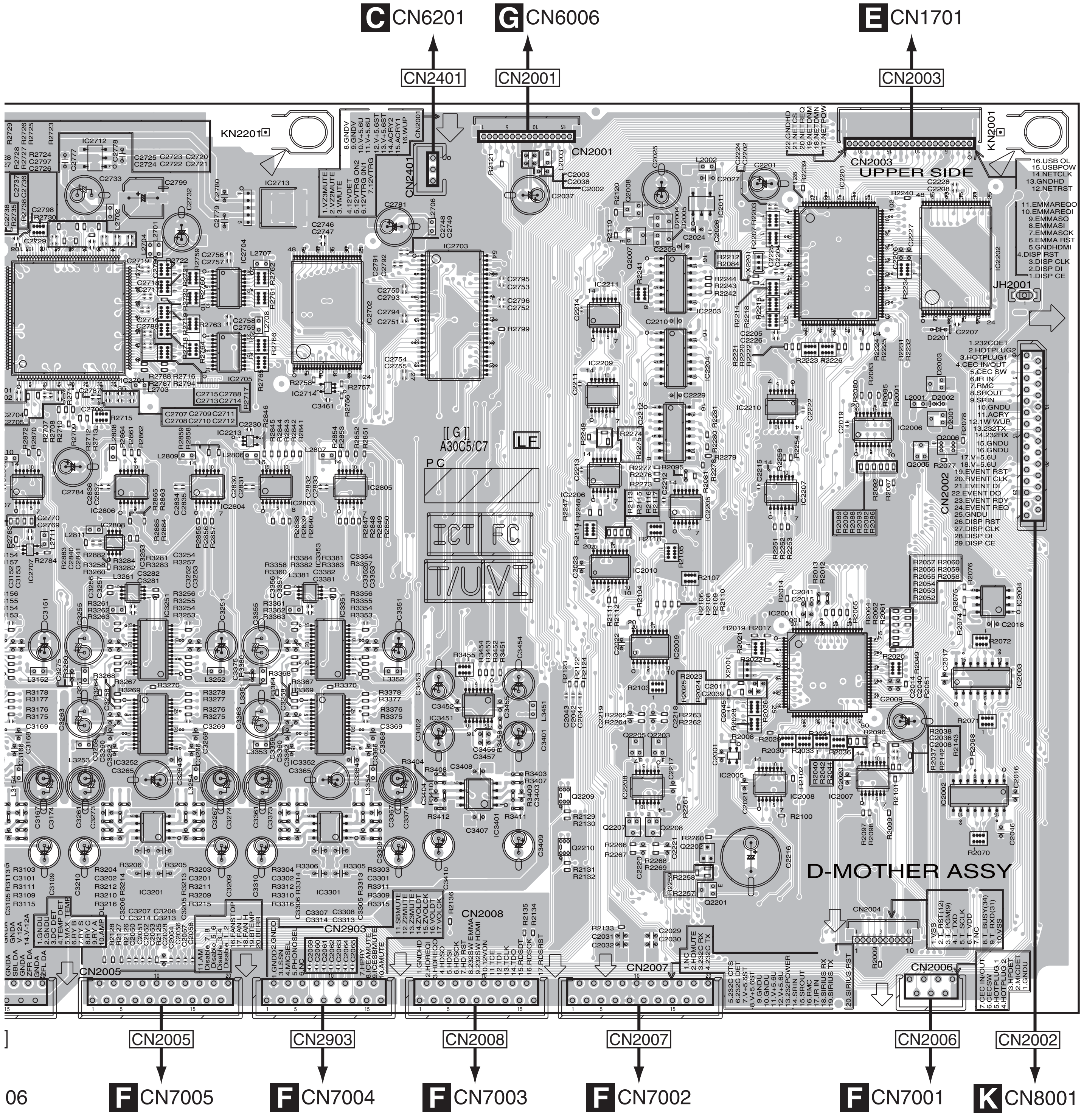
A
B
C
D
E
F

11.2 D-MOTHER ASSY

SIDE A


B D-MOTHER ASSY
IC Q
IC2710
IC2604 IC2712
IC2711
IC2201
IC2713 Q2008
IC2605 IC2601 Q2801
IC2011
IC2703
IC2408 IC2704
IC2202 Q2007
IC2211
IC2603
IC2702
IC2203
IC2403
IC2801
IC2414 IC2209 IC2204
IC2401 IC2701 IC2705
IC2802 IC2602 IC2714
IC2212 IC2210
IC2402 IC2213 IC2006
Q2006
IC2404
IC2706 Q2005
IC2708
IC2709 IC2805 IC2207
IC2206
IC2804 IC2803 IC2205
IC2807 IC2806
IC2808
IC2407
IC2406 IC3153 IC3353
IC3253
IC3053 IC2707
IC2010
IC2409
IC2982 IC3051 IC2004
IC3251 IC3351
IC3151 IC2001
IC2951
IC2009
IC2003
IC3451
Q2203
Q2205
IC3152
IC3052 IC3252 IC3352
IC2412 IC2005
IC2208 IC2002
IC2413 IC2008 Q2209
IC2007
IC3401 Q2208
IC2902 Q2207
Q2210
Q2202
IC2901
IC2981
IC3001
IC3101 IC3201 IC3301 Q2201
IC2983
IC2410 IC2411
JA2601
JA2408
JA2401
JA2402
JA2403
JA2404
JA2405
JA2406
JA2407
KN2401
CN2801
CN2701
CN2403
CN2402
CN2901
CN2902
CN2005
CN2403
CN2402
CN2901
CN2902
F CN7009
F CN7008
F CN7007
F CN7006
F

SIDE A


C CN6201
G CN6006
E CN1701
CN2401
CN2001
CN2003
KN2201
KN2001
UPPER SIDE
JH2001
[[G]]
A30C5/C7
LF
PC
ICT
FC
T/UV
D-MOTHER ASSY
CN2005
CN2903
CN2008
CN2007
CN2004
CN2006
CN2002
F CN7005
F CN7004
F CN7003
F CN7002
F CN7001
K CN8001
06

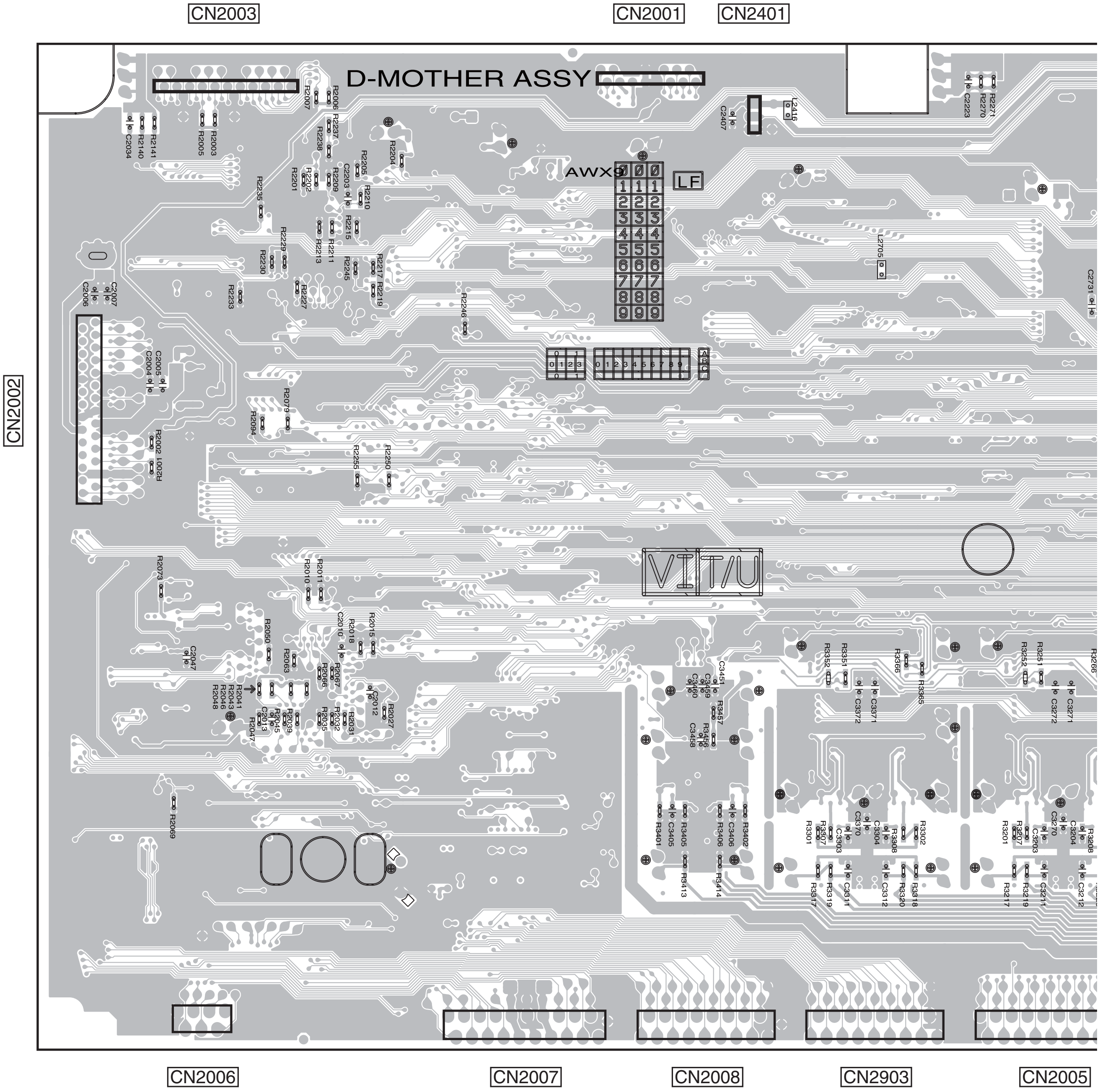
(ANP7649-B)

A
B
C
D
E
F

SIDE B

A

B D-MOTHER ASSY


CN2003
CN2001
CN2401
D-MOTHER ASSY
AWX9
LF
CN2002
VI T/U
CN2006
CN2007
CN2008
CN2903
CN2005
R2141
R2140
C2034
R2003
R2005
R2007
R2006
R2237
R2238
R2204
R2205
C2203
R2209
R2202
R2201
R2210
R2235
R2215
R2211
R2213
R2229
R2230
R2245
R2217
R2219
R2227
R2233
C2007
C2006
R2246
C2005
C2004
R2079
R2094
R2002
R2001
R2255
R2250
R2073
R2011
R2010
R2015
R2018
C2016
R2050
R2063
C2047
R2069
C2407
R2416
L2705
C2223
R2270
R2271
C2731
C3451
R3457
R3456
C3458
R3402
R3401
C3405
R3405
R3406
C3406
R3413
R3414
R3352
R3351
C3372
C3371
R3366
R3365
R3252
R3251
C3272
C3271
R3266
R3301
R3302
C3304
C3370
R3317
R3319
C3311
C3312
R3320
R3318
R3201
C3203
C3204
R3217
R3219
C3211
C3212

B

C

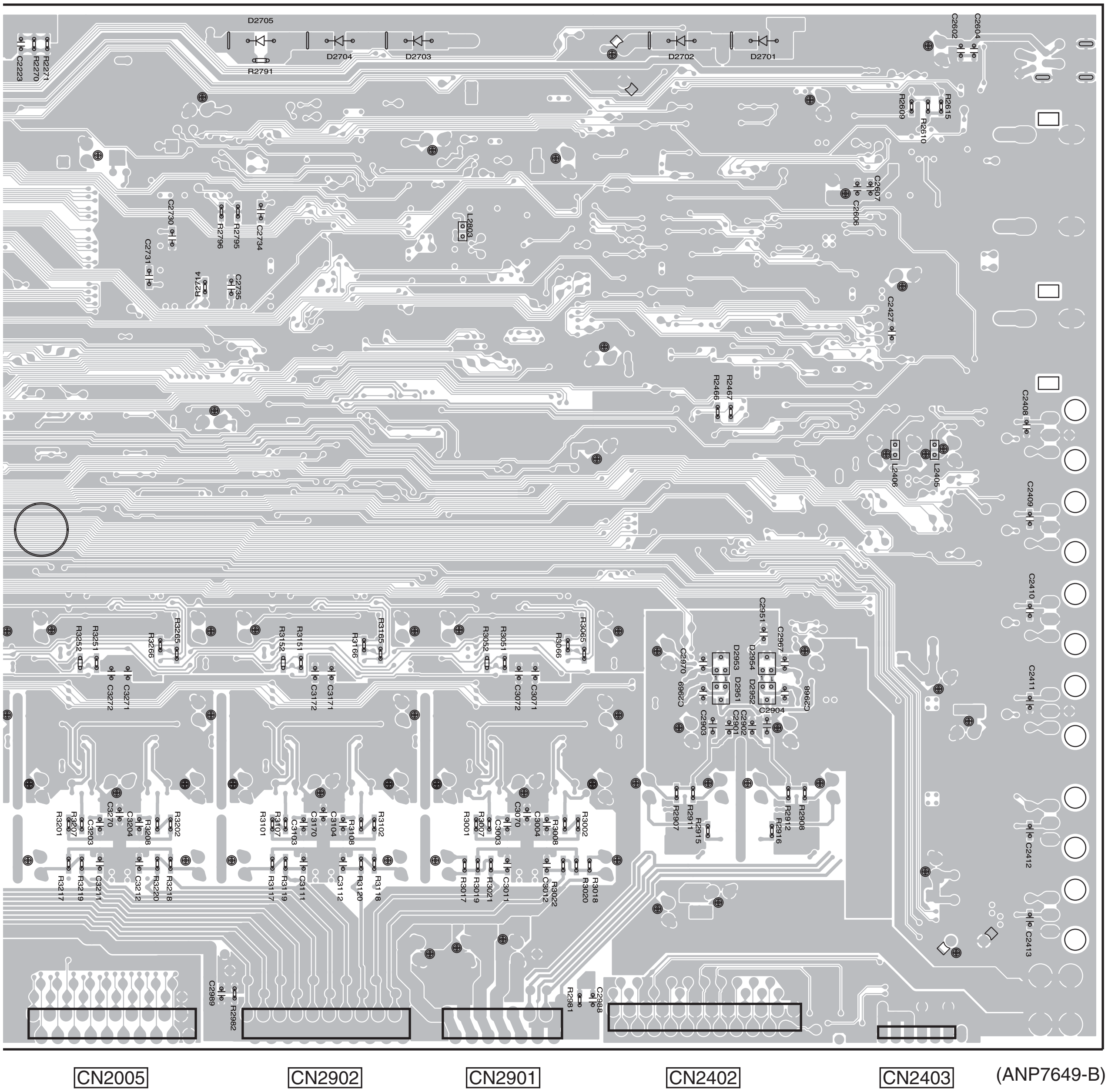
D

E

F

B

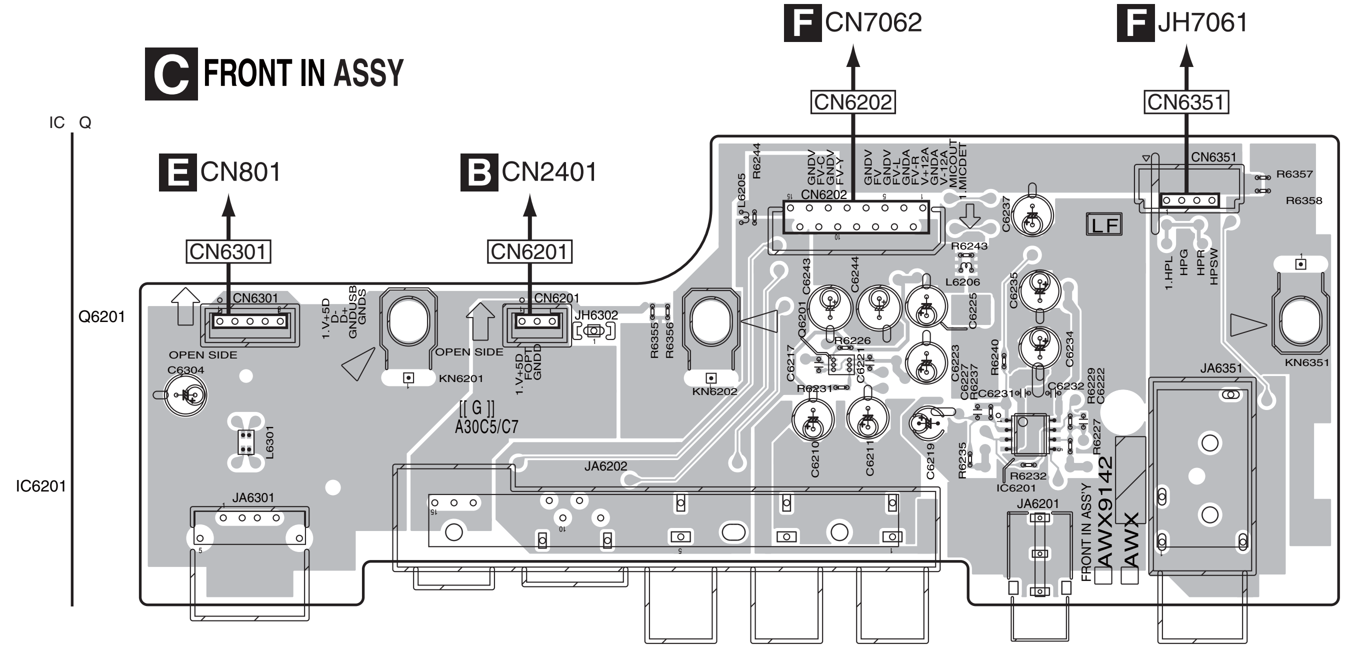
SIDE B


D2705
R2791
D2704
D2703
D2702
D2701
C2602
C2604
R2271
R2270
C2223
R2609
R2610
R2615
C2607
C2606
L2902
C2730
C2731
R2796
R2795
C2734
R2714
C2735
C2427
R2466
R2467
C2408
L2406
L2405
C2409
C2410
C2411
C2412
C2413
R3265
R3266
R3251
R3252
C3271
C3272
R3165
R3166
R3151
R3152
C3171
C3172
R3065
R3066
R3051
R3052
C3071
C3072
C2951
C2967
C2970
C2969
D2953
D2954
D2951
D2952
C2968
C2903
C2902
C2901
C2904
R3201
R3207
C3270
C3203
C3204
R3208
R3202
R3217
R3219
C3211
C3212
R3220
R3218
R3101
R3107
C3103
C3170
C3104
R3108
R3102
R3117
R3119
C3111
C3112
R3120
R3118
R3001
R3007
C3070
C3003
C3004
R3008
R3002
R3017
R3019
R3021
C3011
C3012
R3022
R3018
R3020
R2907
R2911
R2915
R2908
R2912
R2916
C2989
R2982
R2981
C2988
CN2005
CN2902
CN2901
CN2402
CN2403

(ANP7649-B)

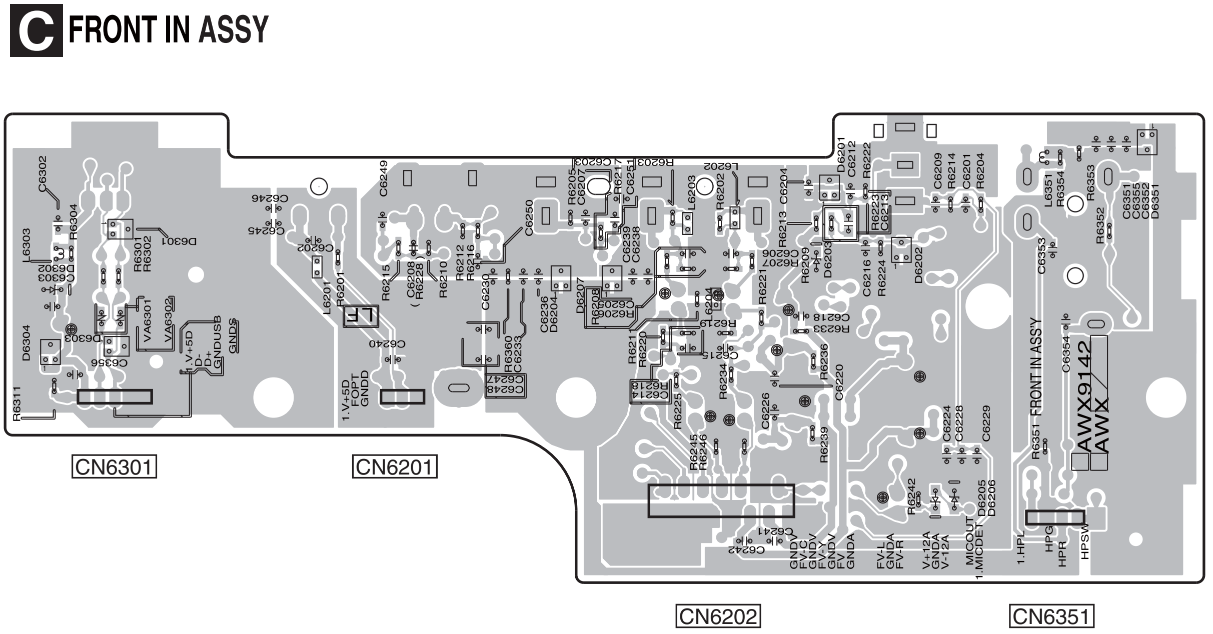
11.3 FRONT IN ASSY

SIDE A **SIDE A**


C FRONT IN ASSY
E CN801
CN6301
B CN2401
CN6201
F CN7062
CN6202
F JH7061
CN6351
IC Q
Q6201
IC6201
OPEN SIDE
C6304
L6301
JA6301
KN6201
KN6202
KN6351
JH6302
1.V+5D
D-
D+
GNDUSB
GNDS
1.V+5D
FOPT
GNDD
[[G]]
A30C5/C7
JA6202
JA6201
JA6351
LF
R6357
R6358
1.HPL
HPG
HPR
HPSW
GNDV
FV-C
GNDV
FV-Y
GNDV
FV
GNDV
FV-L
GNDA
FV-R
V+12A
GNDA
V-12A
MICOUT
1.MICDET
FRONT IN ASS'Y
AWX9142
AWX

(ANP7651-B)

SIDE B **SIDE B**


C FRONT IN ASSY
CN6301
CN6201
CN6202
CN6351
LF
1.V+5D
D-
D+
GNDUSB
GNDS
1.V+5D
FOPT
GNDD
GNDV
FV-C
GNDV
FV-Y
GNDV
FV
GNDA
FV-L
GNDA
FV-R
V+12A
GNDA
V-12A
MICOUT
1.MICDET
1.HPL
HPG
HPR
HPSW
FRONT IN ASS'Y
AWX9142
AWX

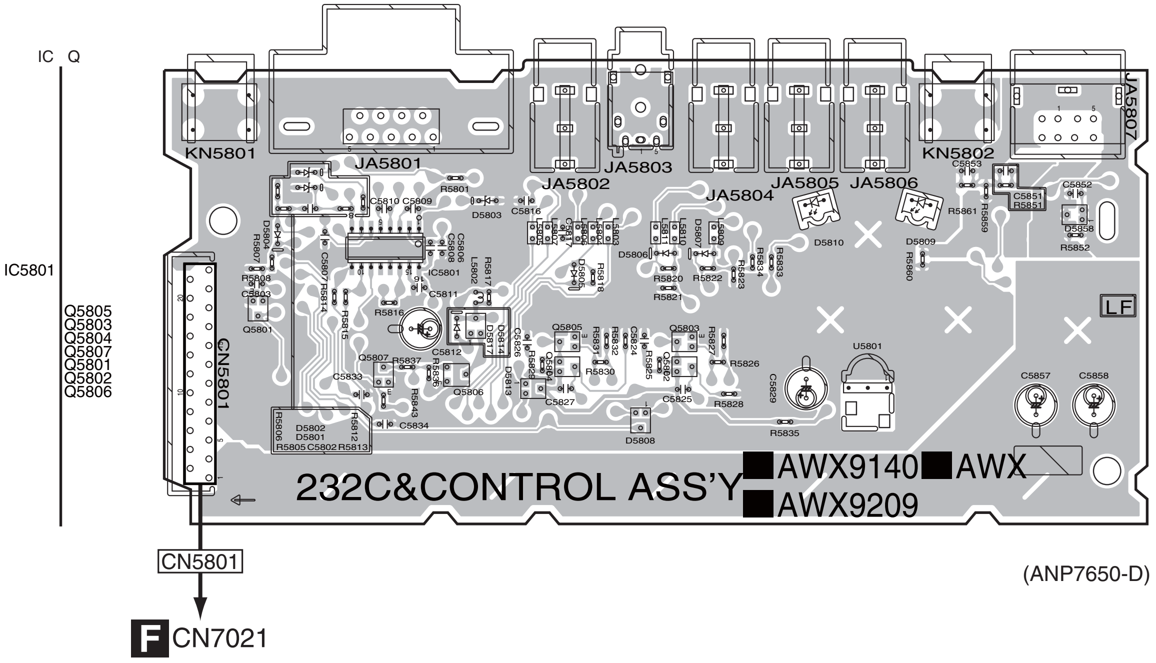
(ANP7651-B)

11.4 232C & CONTROL ASSY

SIDE A

SIDE A

D 232C & CONTROL ASSY

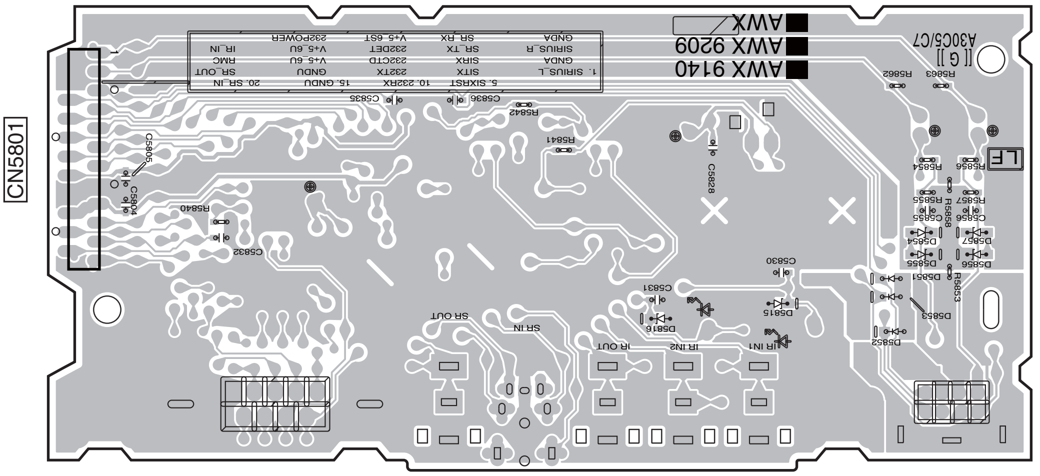

IC Q
IC5801
Q5805
Q5803
Q5804
Q5807
Q5801
Q5802
Q5806
KN5801
JA5801
JA5802
JA5803
JA5804
JA5805
JA5806
KN5802
JA5807
CN5801
C5853
C5852
C5851
R5851
R5861
R5859
D5858
R5852
D5810
D5809
R5860
U5801
C5857
C5858
C5829
R5835
R5828
R5826
D5808
LF
232C&CONTROL ASS'Y
AWX9140
AWX
AWX9209
CN5801
F CN7021

(ANP7650-D)

SIDE B

SIDE B

D 232C & CONTROL ASSY

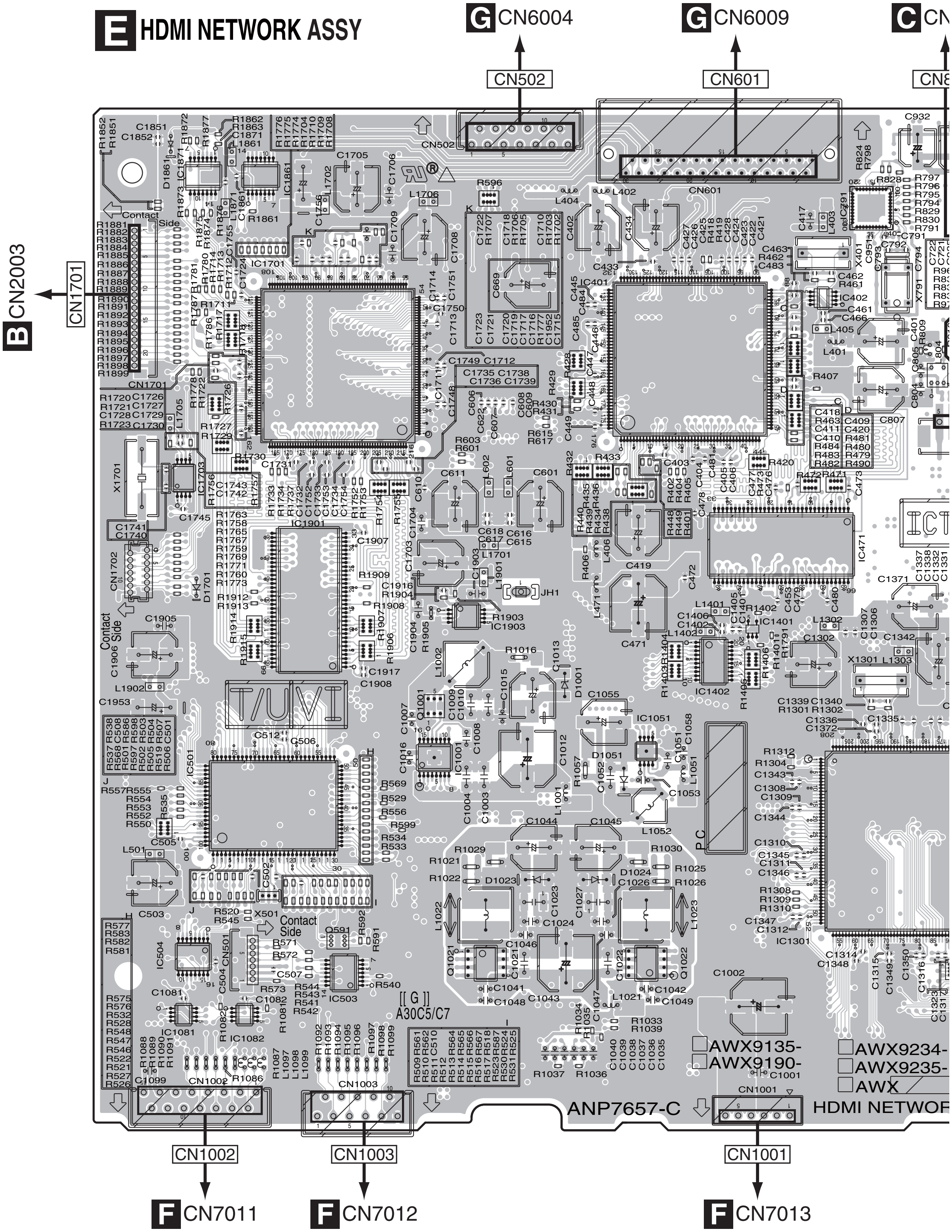

CN5801
AWX
AWX 9209
AWX 9140
A30C5/C7
[[G]]
LF
1. SIRIUS_L
5. SIXRST
10. 232RX
15. GNDU
20. SR_IN
SR OUT
SR IN
IR OUT
IR IN2
IR IN1
C5835
C5836
R5842
R5841
C5828
C5805
C5804
R5840
C5832
C5830
C5831
D5815
D5816

(ANP7650-D)

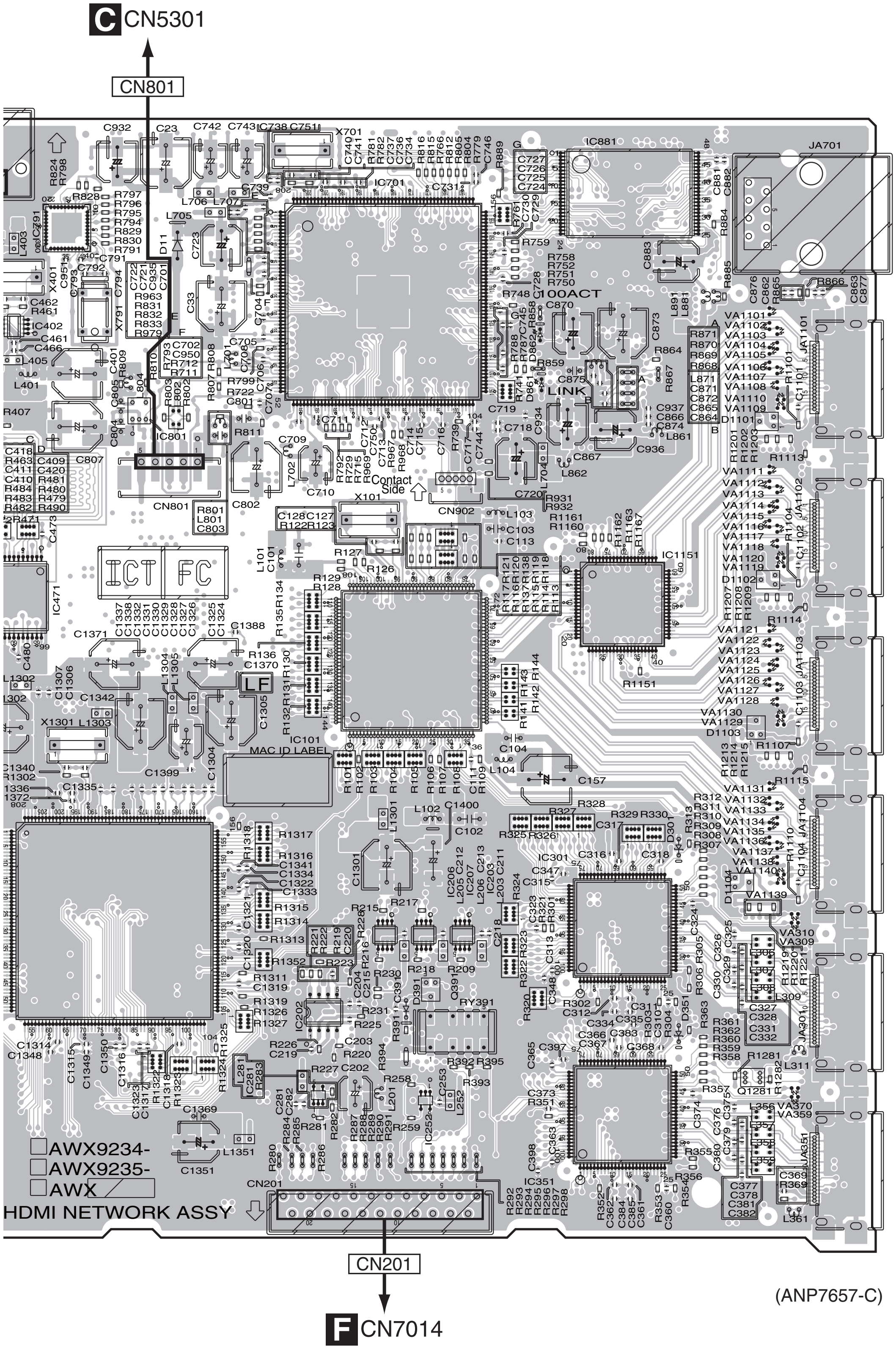
11.5 HDMI NETWORK ASSY

SIDE A

IC	Q
IC881	
IC1871	
IC701	
IC1861	
IC791	
IC1701	
IC401	
IC402	
IC801	
IC1703	
IC1151	
IC1901	
IC471	
IC1401	
IC1903	
IC101	
IC1402	Q1001
IC1051	
IC1001	
IC501	
IC301	
IC207	
IC206	
IC203	
	Q391
IC202	Q591
IC1301	
IC504	Q1021 Q1022
IC281	
IC503	Q1281
IC1081	
IC252	
IC1082	
IC351	


E HDMI NETWORK ASSY
G CN6004
CN502
G CN6009
CN601
C CN
CN8
B CN2003
CN1701
ANP7657-C
AWX9135-
AWX9190-
AWX9234-
AWX9235-
AWX
HDMI NETWOR
[[G]]
A30C5/C7
CN1002
F CN7011
CN1003
F CN7012
CN1001
F CN7013

SIDE A

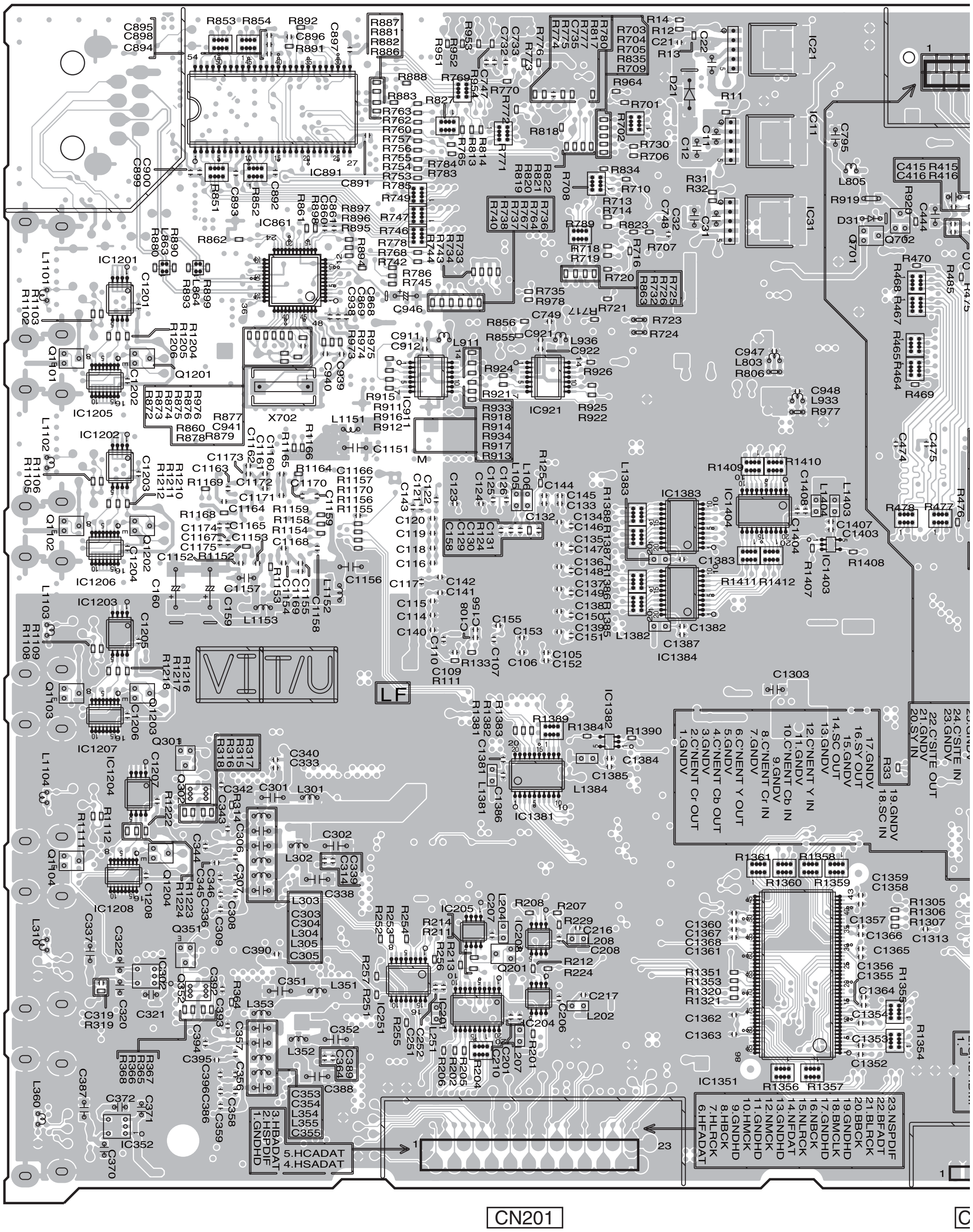

C CN5301
CN801
CN801
IC801
IC701
IC881
JA701
IC101
IC1151
IC301
IC471
IC402
X101
X401
X701
X1301
100ACT
LINK
Contact Side
CN902
MAC ID LABEL
ICT
FC
LF
JA1101
JA1102
JA1103
JA1104
JA301
JA351
RY391
CN201
☐AWX9234-
☐AWX9235-
☐AWX
HDMI NETWORK ASSY
CN201
F CN7014
(ANP7657-C)

A B C D E F

SIDE B

E HDMI NETWORK ASSY

IC Q
IC21
Q1831 Q1821
Q1801 Q1811
Q651 Q671
IC11 Q641
IC1702
IC891
Q631
Q661 Q681
IC861 IC31
Q702
Q701
IC1201
IC1951
IC601
Q1101
Q1201
IC921
IC1205 IC911
IC1202
IC1383
IC1404
IC472 Q1102
Q1202
IC1206 IC1403
IC1203
IC452
IC1384
IC502
IC1071 Q1103
IC1382 Q1203
IC1902
IC1207 Q301
IC1204 Q302
IC505
IC1381
IC1072 Q1104
Q1204
IC1208 IC205
Q351
IC208
Q201
IC302 Q352
IC201
IC251 IC204
IC1021
IC1351
IC352


IC21
IC11
IC31
IC891
IC861
IC1201
IC1205
IC1202
IC1206
IC1203
IC1207
IC1204
IC1208
IC921
IC911
IC1383
IC1404
IC1403
IC1384
IC1382
IC1381
IC205
IC208
IC251
IC201
IC204
IC1351
IC302
IC352
X702
LF
VIT/U
1.GNDV
2.C/NENT Cr OUT
3.GNDV
4.C/NENT Cb OUT
5.GNDV
6.C/NENT Y OUT
7.GNDV
8.C/NENT Cr IN
9.GNDV
10.C/NENT Cb IN
11.GNDV
12.C/NENT Y IN
13.GNDV
14.SC OUT
15.GNDV
16.SY OUT
17.GNDV
18.SC IN
19.GNDV
20.SY IN
21.GNDV
22.C/SITE OUT
23.GNDV
24.C/SITE IN
1.GNDHD
2.HSPDIF
3.HBADAT
4.HSADAT
5.HCADAT
6.HFADAT
7.HLRCK
8.HBCK
9.GNDHD
10.HMCK
11.GNDHD
12.NMCK
13.GNDHD
14.NFADAT
15.NLRCK
16.NBCK
17.GNDHD
18.BMCLK
19.GNDHD
20.BBCK
21.BLRCK
22.BFADT
23.NSPDIF
CN201

SIDE B

A

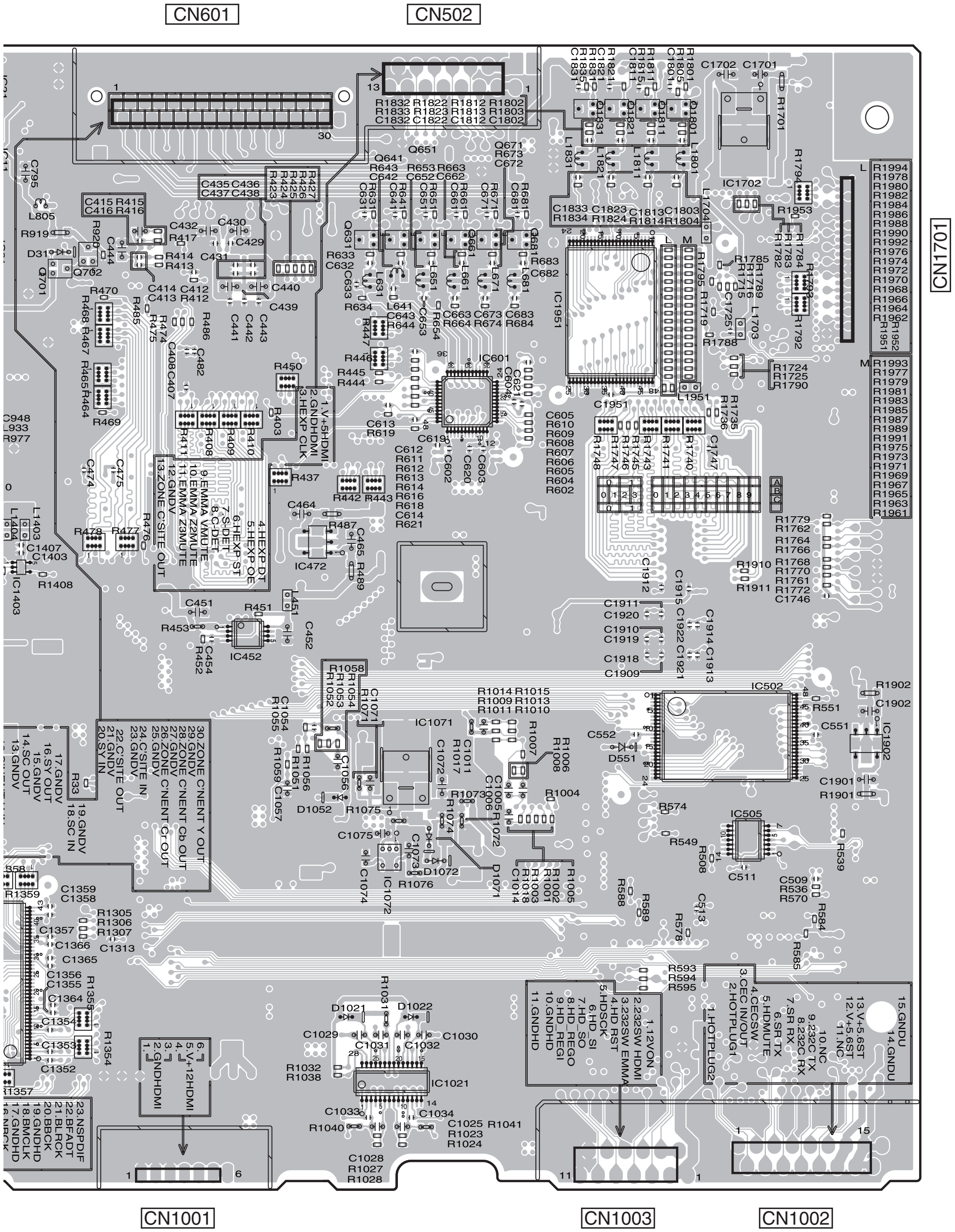
B

C

D

E

F

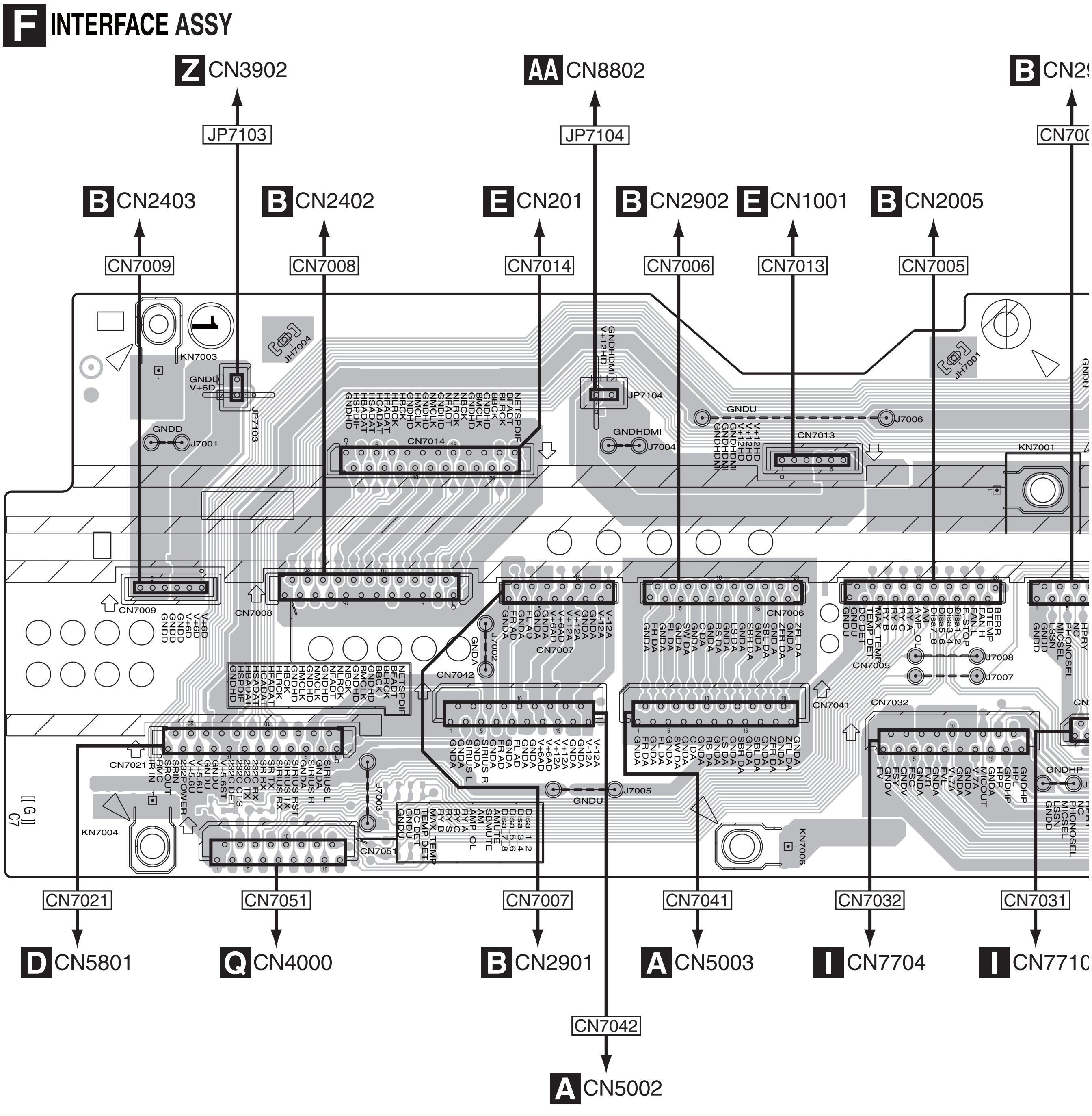


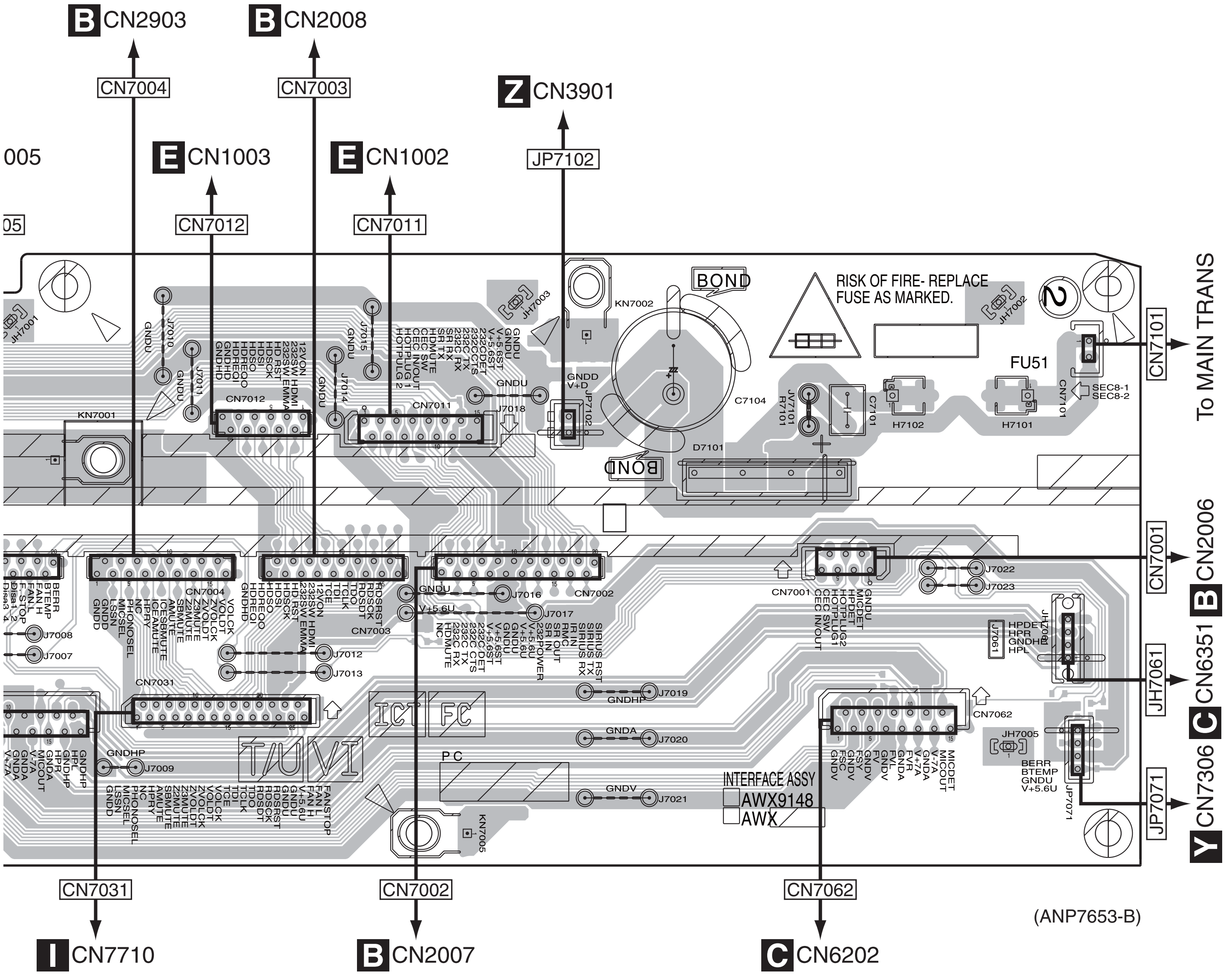
CN601
CN502
CN1701
CN1001
CN1003
CN1002
IC601
IC1951
IC1702
IC472
IC452
IC502
IC1071
IC1072
IC505
IC1902
IC1021
IC1403
1.V+5HDMI
2.GNDHDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.C-DET
9.EMMA VMUTE
10.EMMA Z2MUTE
11.EMMA Z3MUTE
12.GNDV
13.ZONE C.SITE OUT
13.GNDV
14.SC OUT
15.GNDV
16.SY OUT
17.GNDV
18.SC IN
19.GNDV
20.SY IN
21.GNDV
22.C.SITE OUT
23.GNDV
24.C.SITE IN
25.GNDV
26.ZONE C'NENT Cr OUT
27.GNDV
28.ZONE C'NENT Cb OUT
29.GNDV
30.ZONE C'NENT Y OUT
1.GNDHDMI
5.V+12HDMI
1.1.12VON
2.232SW HDMI
3.232SW EMMA
4.HD RST
5.HDSCK
6.HD_SI
7.HD_SO
8.HD_REGO
9.HD_REGI
10.GNDHD
11.GNDHD
1.HOTPLUG1
2.HOTPLUG2
3.CEC IN/OUT
4.CECSW
5.HDMUTE
6.SR TX
7.SR RX
8.232C TX
9.232C RX
10.NC
11.NC
12.V+5.6ST
13.V+5.6ST
14.GNDU
15.GNDU
23.NSPDIF
22.BFADT
21.BLRCK
20.BBCK
19.GNDHD
18.BMCLK
17.GNDHD

(ANP7657-C)

11.6 INTERFACE ASSY

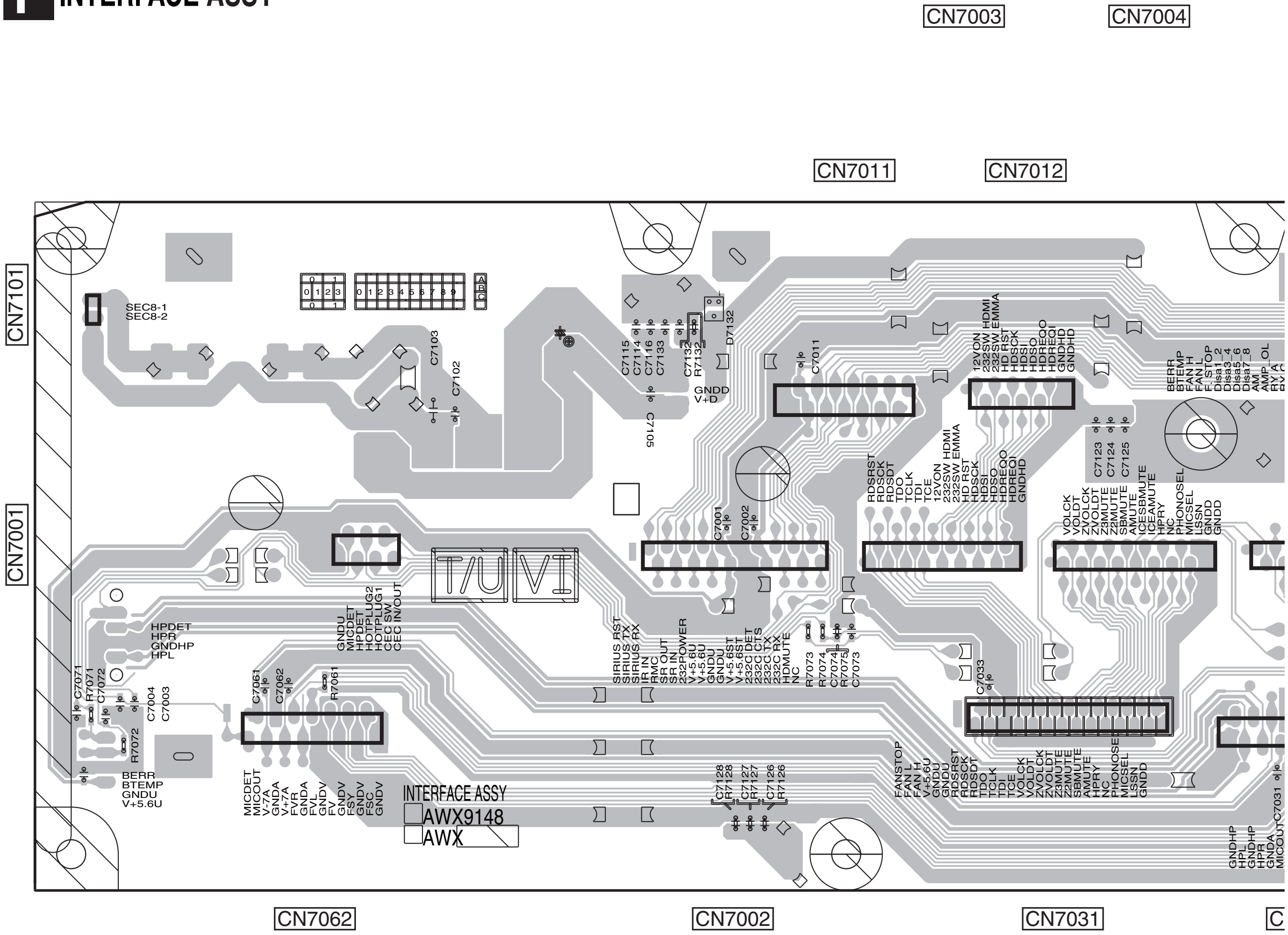
SIDE A


F INTERFACE ASSY
Z CN3902
JP7103
AA CN8802
JP7104
B CN2403
CN7009
B CN2402
CN7008
E CN201
CN7014
B CN2902
CN7006
E CN1001
CN7013
B CN2005
CN7005
KN7003
JH7004
JH7001
KN7001
J7001
J7004
J7006
J7002
J7003
J7005
J7007
J7008
CN7042
CN7041
CN7007
CN7021
CN7051
CN7032
KN7004
KN7006
CN7021
D CN5801
CN7051
Q CN4000
CN7007
B CN2901
CN7041
A CN5003
CN7032
I CN7704
CN7031
I CN7710
CN7042
A CN5002

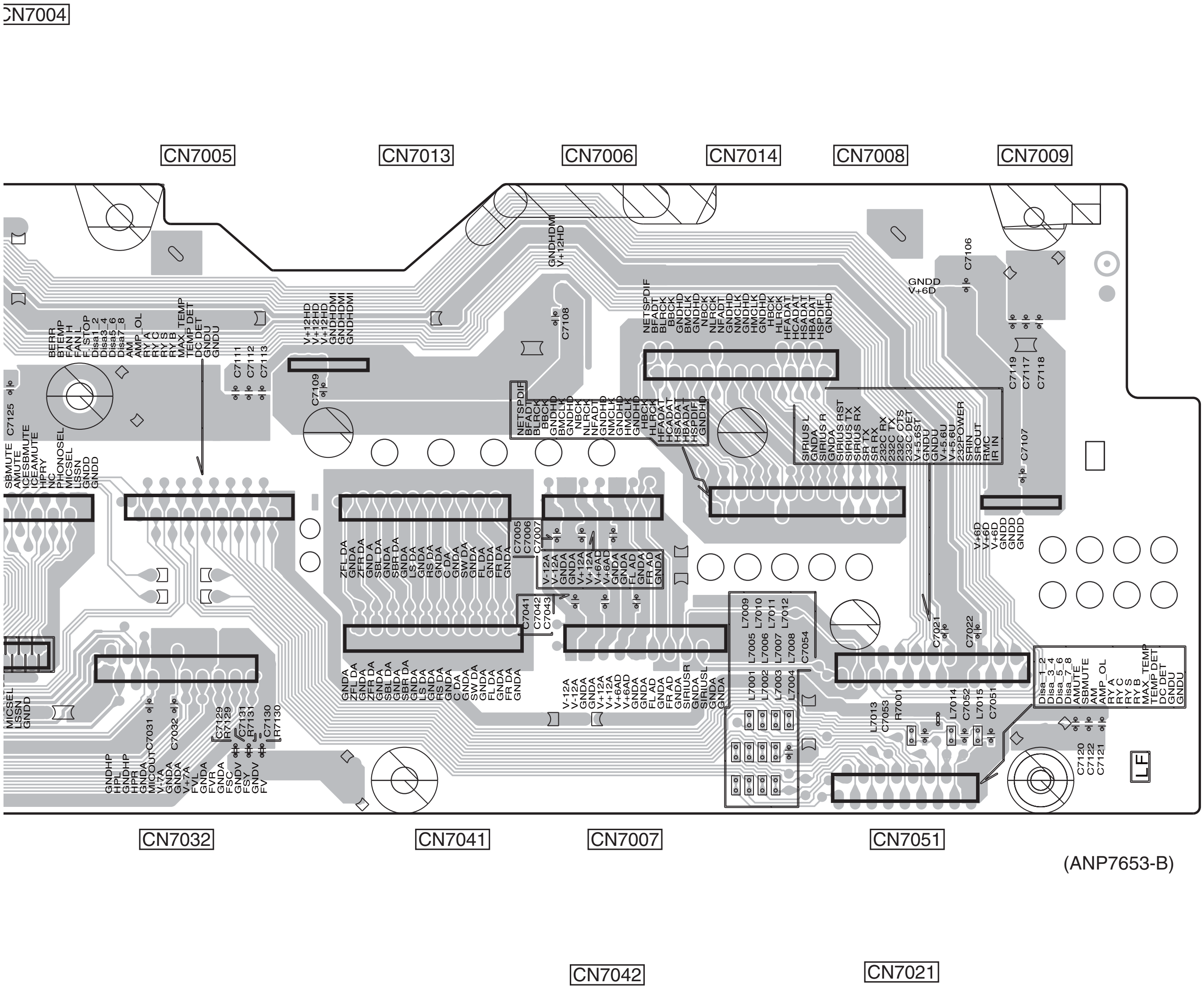

B CN2903
CN7004
B CN2008
CN7003
Z CN3901
JP7102
005
E CN1003
CN7012
E CN1002
CN7011
05
BOND
RISK OF FIRE- REPLACE
FUSE AS MARKED.
FU51
KN7002
KN7001
C7104
D7101
H7102
H7101
CN7101
To MAIN TRANS
CN7001
B CN2006
JH7061
C CN6351
JP7071
Y CN7306
CN7002
CN7031
CN7062
P C
ICT
FC
T/U
VI
INTERFACE ASSY
AWX9148
AWX
KN7005
CN7031
I CN7710
CN7002
B CN2007
CN7062
C CN6202
(ANP7653-B)

SIDE B

F INTERFACE ASSY


CN7003
CN7004
CN7011
CN7012
CN7101
CN7001
CN7062
CN7002
CN7031
SEC8-1
SEC8-2
C7103
C7102
C7115
C7114
C7116
C7133
C7132
R7132
D7132
GNDD
V+D
C7105
C7011
12VON HDMI
232SW HDMI
232SW EMMA
HD RST
HDSCK
HDSI
HDSO
HDREQO
HDREQI
GNDHD
GNDHD
BERR
BTEMP
FAN H
FAN L
F STOP
Disa1_2
Disa3_4
Disa5_6
Disa7_8
AMI
AMP_OL
RY A
RDSRST
RDSCK
RDSDT
TDO
TCLK
TDI
TCE
12VON
232SW HDMI
232SW EMMA
HD RST
HDSCK
HDSI
HDSO
HDREQO
HDREQI
GNDHD
C7123
C7124
C7125
VOLCK
VOLDT
ZVOLCK
ZVOLDT
Z3MUTE
Z2MUTE
SBMUTE
AMUTE
ICESBMUTE
ICEAMUTE
HPRY
NC
PHONOSEL
MICSEL
LSSN
GNDD
GNDD
C7001
C7002
T/U
VI
HPDET
HPR
GNDHP
HPL
GNDU
MICDET
HPDET
HOTPLUG2
HOTPLUG1
CEC SW
CEC IN/OUT
SIRIUS RST
SIRIUS TX
SIRIUS RX
IR IN
RMO
SR OUT
SR IN
232POWER
V+5.6U
V+5.6U
GNDU
GNDU
V+5.6ST
V+5.6ST
232C DET
232C CTS
232C TX
232C RX
HDMUTE
NC
R7073
R7074
C7074
R7075
C7073
C7033
C7071
R7071
C7072
C7004
C7003
R7072
BERR
BTEMP
GNDU
V+5.6U
C7061
C7062
R7061
MICDET
MICOUT
V-7A
GNDA
V+7A
FVR
GNDA
FVL
GNDV
FV
GNDV
FSY
GNDV
FSC
GNDV
INTERFACE ASSY
AWX9148
AWX
C7128
R7128
C7127
R7127
C7126
R7126
FANSTOP
FAN L
FAN H
V+5.6U
GNDU
GNDU
RDSRST
RDSCK
RDSDT
TDO
TCLK
TDI
TCE
VOLCK
VOLDT
ZVOLCK
ZVOLDT
Z3MUTE
Z2MUTE
SBMUTE
AMUTE
HPRY
NC
PHONOSEL
MICSEL
LSSN
GNDD
C7031
GNDHP
HPL
GNDHP
HPR
GNDA
MICOUT
C

SIDE B


CN7004
CN7005
CN7013
CN7006
CN7014
CN7008
CN7009
CN7032
CN7041
CN7007
CN7051
CN7042
CN7021
(ANP7653-B)
LF
GNDHDMI
V+12HD
V+12HD
V+12HD
V+12HD
GNDHDMI
GNDHDMI
GNDHDMI
BERR
BTEMP
FAN H
FAN L
F STOP
Disa1_2
Disa3_4
Disa5_6
Disa7_8
AM
AMP_OL
RY A
RY C
RY S
RY B
MAX_TEMP
TEMP DET
DC DET
GNDU
GNDU
SBMUTE
AMUTE
ICESBMUTE
ICEAMUTE
HPRY
NC
PHONOSEL
MICSEL
LSSN
GNDD
GNDD
NETSPDIF
BFADT
BLRCK
BBCK
GNDHD
BMCLK
GNDHD
NBCK
NLRCK
NFADT
GNDHD
NMCLK
GNDHD
HMCLK
GNDHD
HBCK
HLRCK
HFADAT
HCADAT
HSADAT
HBADAT
HSPDIF
GNDHD
SIRIUS L
GNDA
SIRIUS R
GNDA
SIRIUS RST
SIRIUS TX
SIRIUS RX
SR TX
SR RX
232C RX
232C TX
232C CTS
232C DET
V+5.6ST
GNDU
GNDU
V+5.6U
V+5.6U
232POWER
SRIN
SROUT
RMC
IR IN
GNDD
V+6D
V+6D
V+6D
V+6D
GNDD
GNDD
GNDD
ZFL DA
GNDA
ZFR DA
GND A
SBL DA
GNDA
SBR DA
GNDA
LS DA
GNDA
RS DA
GNDA
C DA
GNDA
SW DA
GNDA
FL DA
GNDA
FR DA
GNDA
V-12A
V-12A
GNDA
GNDA
V+12A
V+12A
V+6AD
V+6AD
GNDA
FL AD
GNDA
FR AD
GNDA
SIRIUSR
GNDA
SIRIUSL
GNDA
GNDA
MICSEL
LSSN
GNDD
GNDHP
HPL
GNDHP
HPR
GNDA
MICOUT
V-7A
GNDA
GNDA
V+7A
FVL
GNDA
FVR
GNDA
FSC
GNDV
FSY
GNDV
FV
Disa_1_2
Disa_3_4
Disa_5_6
Disa_7_8
AMUTE
SBMUTE
AM
AMP_OL
RY A
RY C
RY S
RY B
MAX_TEMP
TEMP DET
DC DET
GNDU
GNDU
C7005
C7006
C7007
C7021
C7022
C7031
C7032
C7041
C7042
C7043
C7051
C7052
C7053
C7054
C7106
C7107
C7108
C7109
C7111
C7112
C7113
C7117
C7118
C7119
C7120
C7121
C7122
C7125
C7129
C7130
C7131
R7001
R7129
R7130
R7131
L7001
L7002
L7003
L7004
L7005
L7006
L7007
L7008
L7009
L7010
L7011
L7012
L7013
L7014
L7015

11.7 COMPONENT and V BRIDGE ASSYS

SIDE A

A

IC	Q	
	Q6025	
	Q6013	
	Q6011	
	Q6009	
	Q6023	
IC6007	Q6010	
	Q6014	Q6012
	Q6024	
IC6002		
IC6005		
IC6008		
IC6001		
IC6009		
IC6015		
IC6012		
IC6013		
IC6003		
IC6004		
IC6010		
IC6014		
	Q6002	
	Q6004	Q6006
	Q6007	Q6001
		Q6021
	Q6003	Q6016
	Q6005	Q6020
		Q6015
	Q6019	
	Q6018	
IC6006	Q6022	
	Q6008	
	Q6017	

B

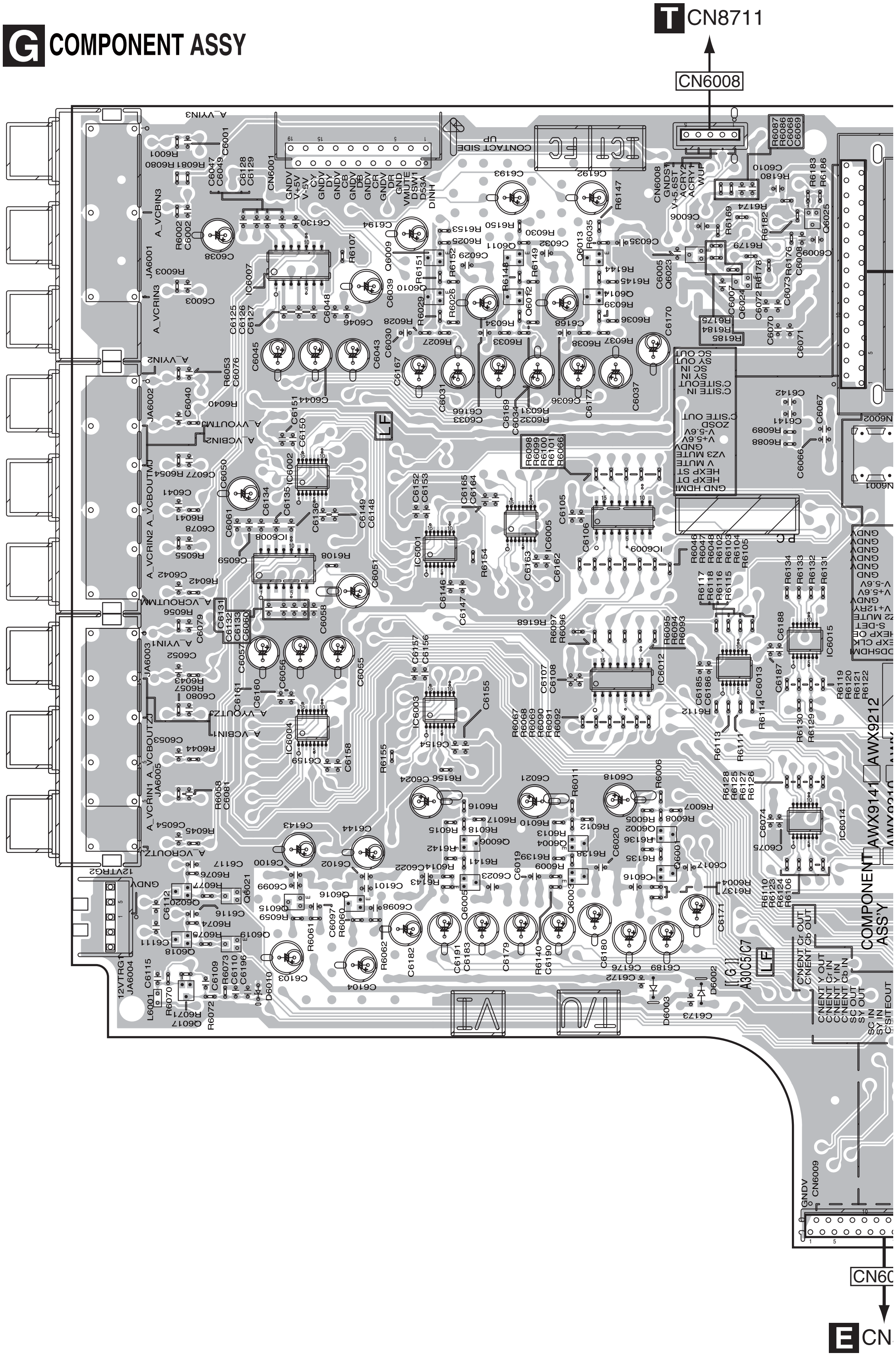
C

D

E

F

G COMPONENT ASSY

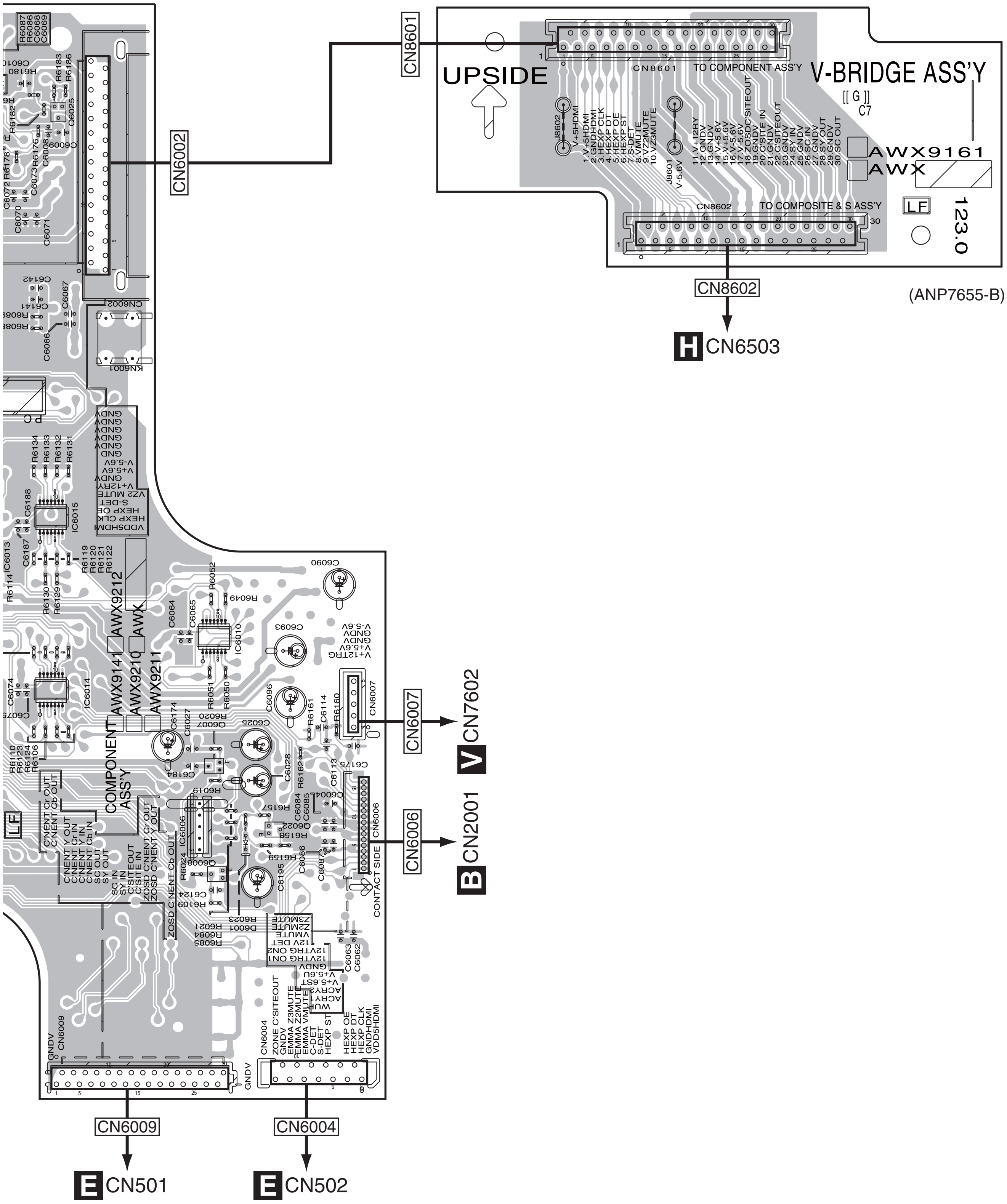

T CN8711
CN6008
CONTACT SIDE
UP
CN6001
GNDV
V+5V
V-5V
CY
GNDV
DY
GNDV
CB
GNDV
DB
GNDV
CR
GNDV
DR
GND
VMUTE
DSW1
D5SA
DINH
CN6008
GNDS1
V+5.6S1
ACRY2
ACRY1
WUP
A_VYIN3
A_VCBIN3
A_VCRIN3
JA6001
A_VYIN2
JA6002
A_VYOUTM
A_VCBIN2
A_VCBOUTM
A_VCRIN2
A_VCROUTM
A_VYIN1
JA6003
A_VYOUT2
A_VCBIN1
A_VCBOUT2
A_VCRIN1
JA6005
A_VCROUT2
12VTRG2
GNDV
12VTRG1
JA6004
IC6007
IC6002
IC6008
IC6001
IC6005
IC6009
IC6015
IC6012
IC6013
IC6003
IC6004
IC6014
IC6006
AWX9141
AWX9212
COMPONENT ASSY
A30C5/C7
LF
CNENT Cr OUT
CNENT Cb OUT
CNENT Y OUT
CNENT Cr IN
CNENT Y IN
CNENT Cb IN
SY OUT
SC OUT
SC IN
SY IN
C/SITEOUT
C/SITE IN
C/SITE OUT
ZOSD
V-5.6V
V+5.6V
VZ3 MUTE
V MUTE
GNDV
HEXP ST
HEXP DT
GND HDMI
S-DET
D5SHDM
CN6002
CN6001
CN6009
GNDV
CN60
E CN

SIDE A

A

1

J V-BRIDGE ASSY

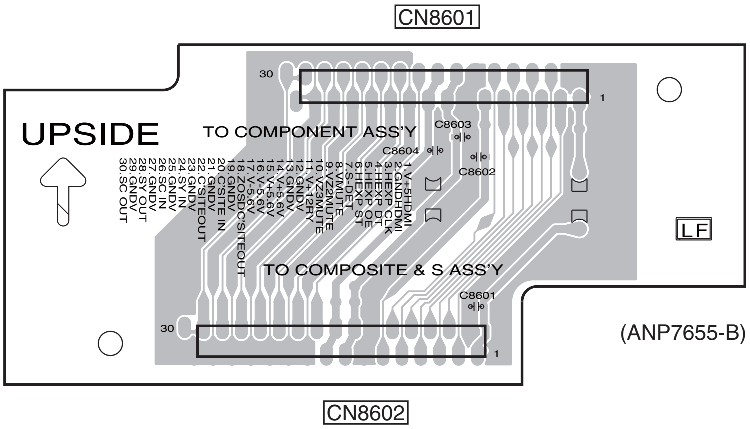

CN8601
CN6002
UPSIDE
CN8601 TO COMPONENT ASS'Y
V-BRIDGE ASS'Y
[[G]]
C7
AWX9161
AWX
LF
123.0
J8602
V+5HDMI
1.V+5HDMI
2.GNDHDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.VMUTE
9.VZ2MUTE
10.VZ3MUTE
J8601
V-5.6V
11.V+12RY
12.GNDV
13.GNDV
14.V+5.6V
15.V+5.6V
16.V-5.6V
17.V-5.6V
18.ZOSDC'SITEOUT
19.GNDV
20.C'SITE IN
21.GNDV
22.C'SITEOUT
23.GNDV
24.SY IN
25.GNDV
26.SC IN
27.GNDV
28.SY OUT
29.GNDV
30.SC OUT
CN8602 TO COMPOSITE & S ASS'Y
CN8602
H CN6503
(ANP7655-B)
COMPONENT ASS'Y
AWX9141
AWX9210
AWX9211
AWX9212
AWX
LF
IC6013
IC6014
IC6015
IC6010
IC6006
CN6007
V CN7602
CN6006
B CN2001
CONTACT SIDE
CN6009
E CN501
CN6004
E CN502

(ANP7651-B)

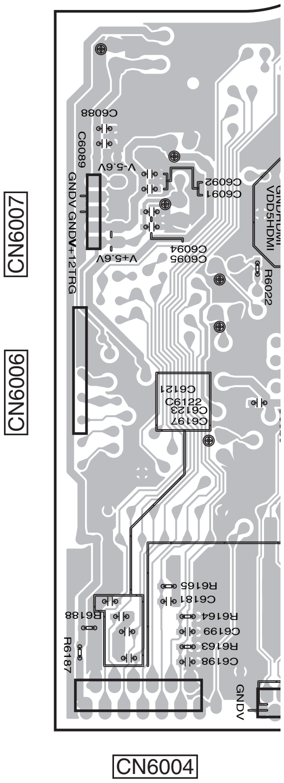
B C D E F

J G

J V-BRIDGE ASSY

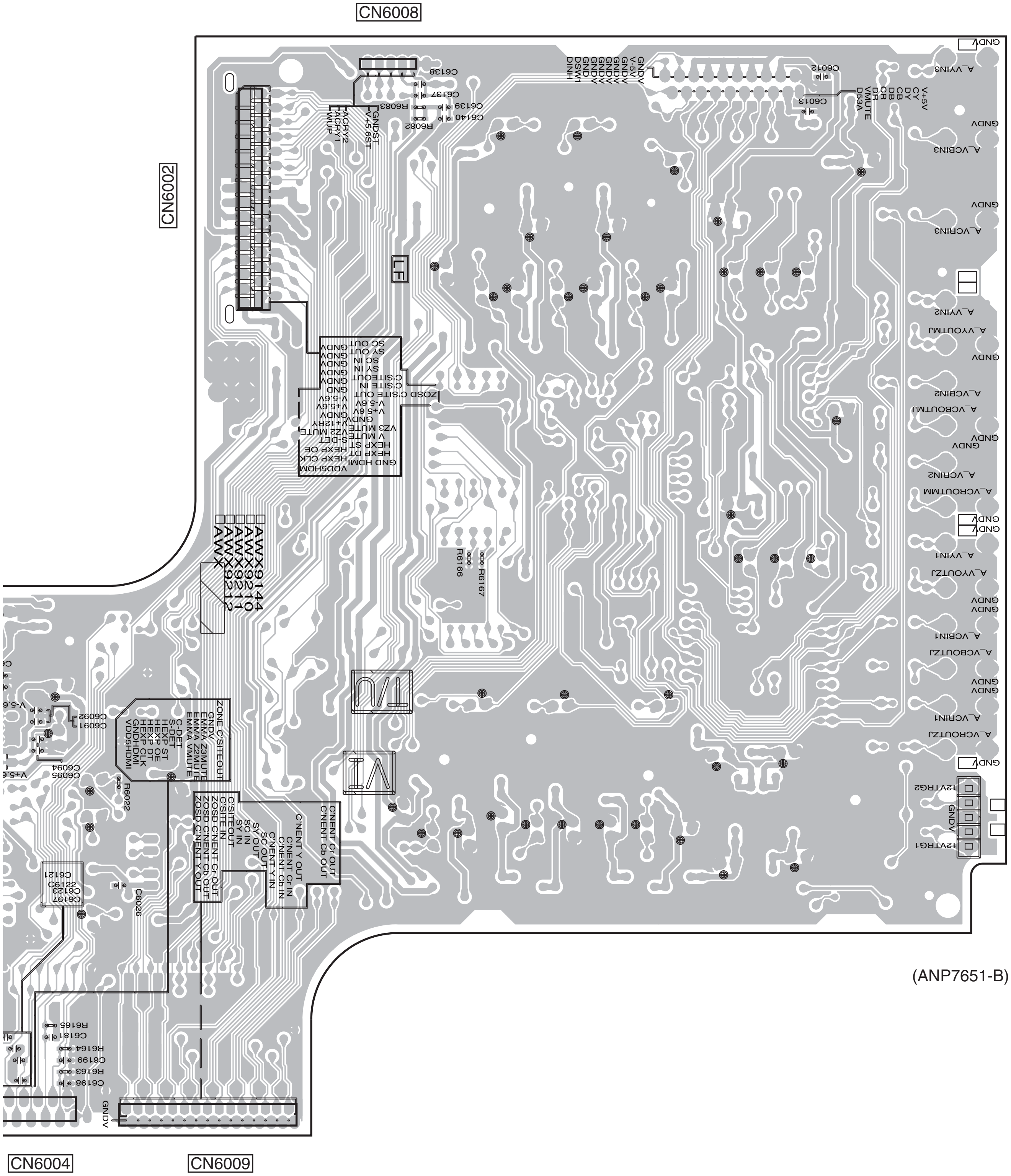

CN8601
30
1
UPSIDE
TO COMPONENT ASS'Y
C8603
C8604
C8602
1.V+5HDMI
2.GNDHDMI
3.HEXP CLK
4.HEXP DT
5.HEXP OE
6.HEXP ST
7.S-DET
8.VMUTE
9.VZ2MUTE
10.VZ3MUTE
11.V+12RY
12.GNDV
13.GNDV
14.V+5.6V
15.V+5.6V
16.V-5.6V
17.V-5.6V
18.ZOSDC'SITEOUT
19.GNDV
20.C'SITE IN
21.GNDV
22.C'SITEOUT
23.GNDV
24.SY IN
25.GNDV
26.SC IN
27.GNDV
28.SY OUT
29.GNDV
30.SC OUT
LF
TO COMPOSITE & S ASS'Y
C8601
30
1
CN8602

(ANP7655-B)


CN6007
CN6006
CN6004
C6088
C6089
V-5.6V
C6092
C6091
GNDV
GNDV
V+12TRG
V+5.6V
C6094
C6095
VDD5HDMI
R6022
C6121
C6122
C6123
C6197
R6165
C6181
R6164
C6199
R6163
C6198
R6188
R6187
GNDV

SIDE B

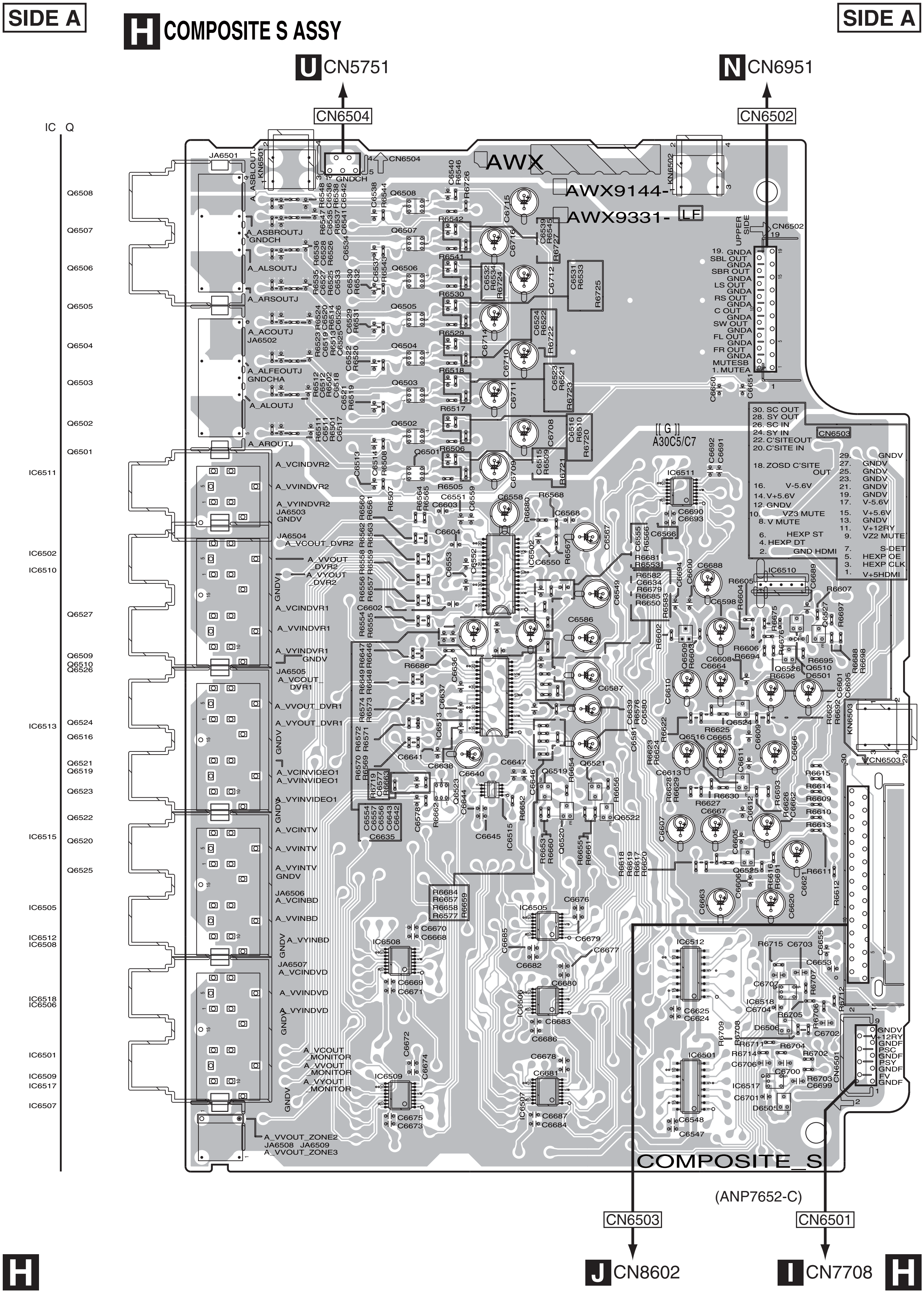
G COMPONENT ASSY


CN6008
CN6002
CN6004
CN6009
LF
AWX9144
AWX9210
AWX9211
AWX9212
GNDV
A_VYIN3
A_VCBIN3
A_VCRIN3
A_VYIN2
A_VYOUTMJ
A_VCBIN2
A_VCBOUTMJ
A_VCRIN2
A_VCROUTMM
A_VYIN1
A_VYOUTZJ
A_VCBIN1
A_VCBOUTZJ
A_VCRIN1
A_VCROUTZJ
12VTRG2
12VTRG1
C6138
C6137
C6139
C6140
R6083
R6082
C6012
C6013
R6166
R6167
R6022
C6026
C6091
C6092
C6094
C6095
C6121
C6122
C6123
C6197
R6165
C6181
R6164
C6199
R6163
C6198

(ANP7651-B)

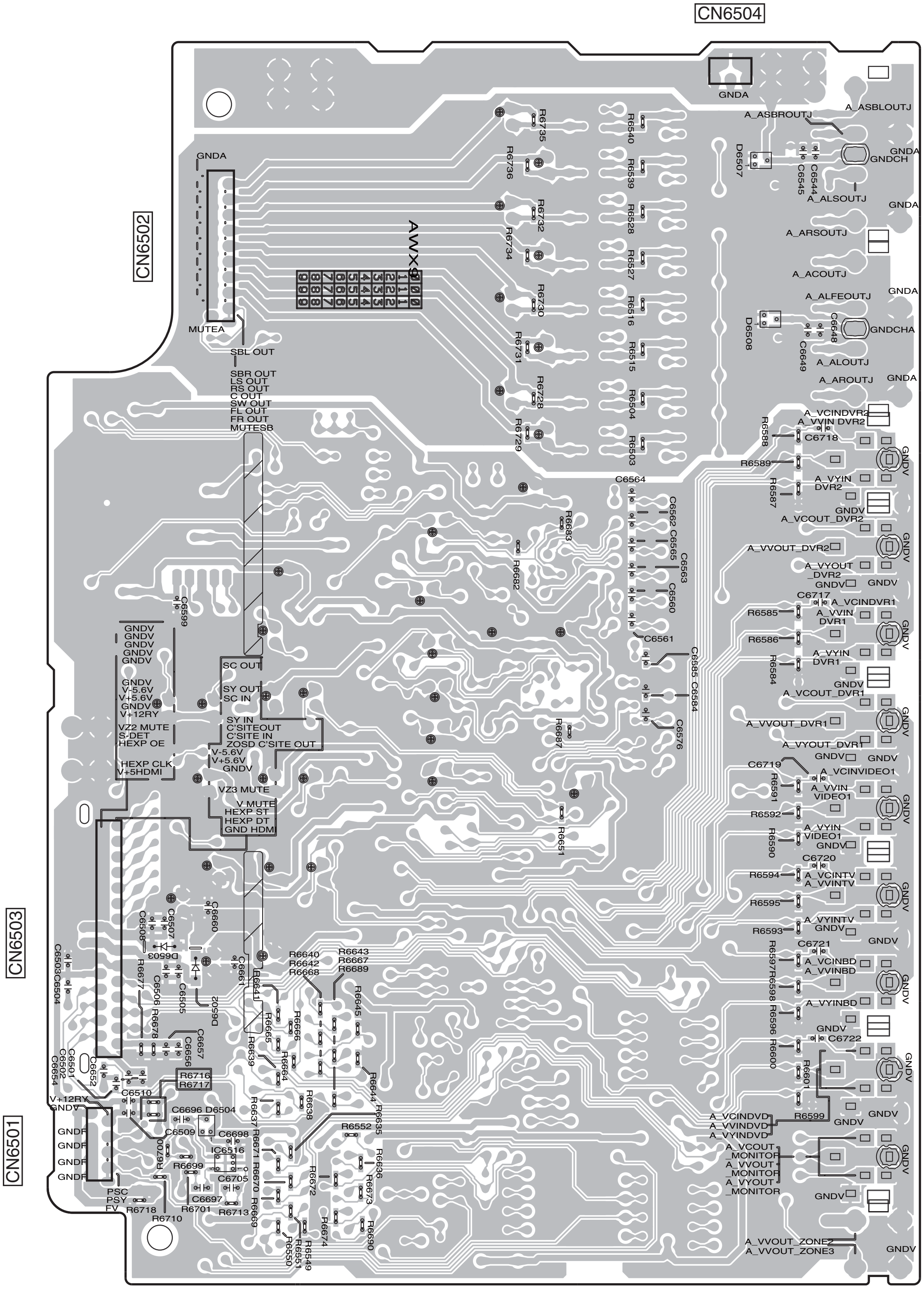
A
B
C
D
E
F

11.8 COMPOSITE S ASSY


SIDE A
H COMPOSITE S ASSY
SIDE A
U CN5751
CN6504
N CN6951
CN6502
IC Q
AWX
AWX9144-
AWX9331- LF
19. GNDA
SBL OUT
GNDA
SBR OUT
GNDA
LS OUT
GNDA
RS OUT
GNDA
C OUT
GNDA
SW OUT
GNDA
FL OUT
GNDA
FR OUT
GNDA
MUTESB
1. MUTEA
30. SC OUT
28. SY OUT
26. SC IN
24. SY IN
22. C'SITEOUT
20. C'SITE IN
18. ZOSD C'SITE OUT
16. V-5.6V
14. V+5.6V
12. GNDV
10. VZ3 MUTE
8. V MUTE
6. HEXP ST
4. HEXP DT
2. GND HDMI
29. GNDV
27. GNDV
25. GNDV
23. GNDV
21. GNDV
19. GNDV
17. V-5.6V
15. V+5.6V
13. GNDV
11. V+12RY
9. VZ2 MUTE
7. S-DET
5. HEXP OE
3. HEXP CLK
1. V+5HDMI
GNDV
V+12RY
GNDF
PSC
GNDF
PSY
GNDF
FV
GNDF
COMPOSITE_S
(ANP7652-C)
CN6503
CN6501
J CN8602
I CN7708
H

SIDE B **SIDE B**

H COMPOSITE S ASSY

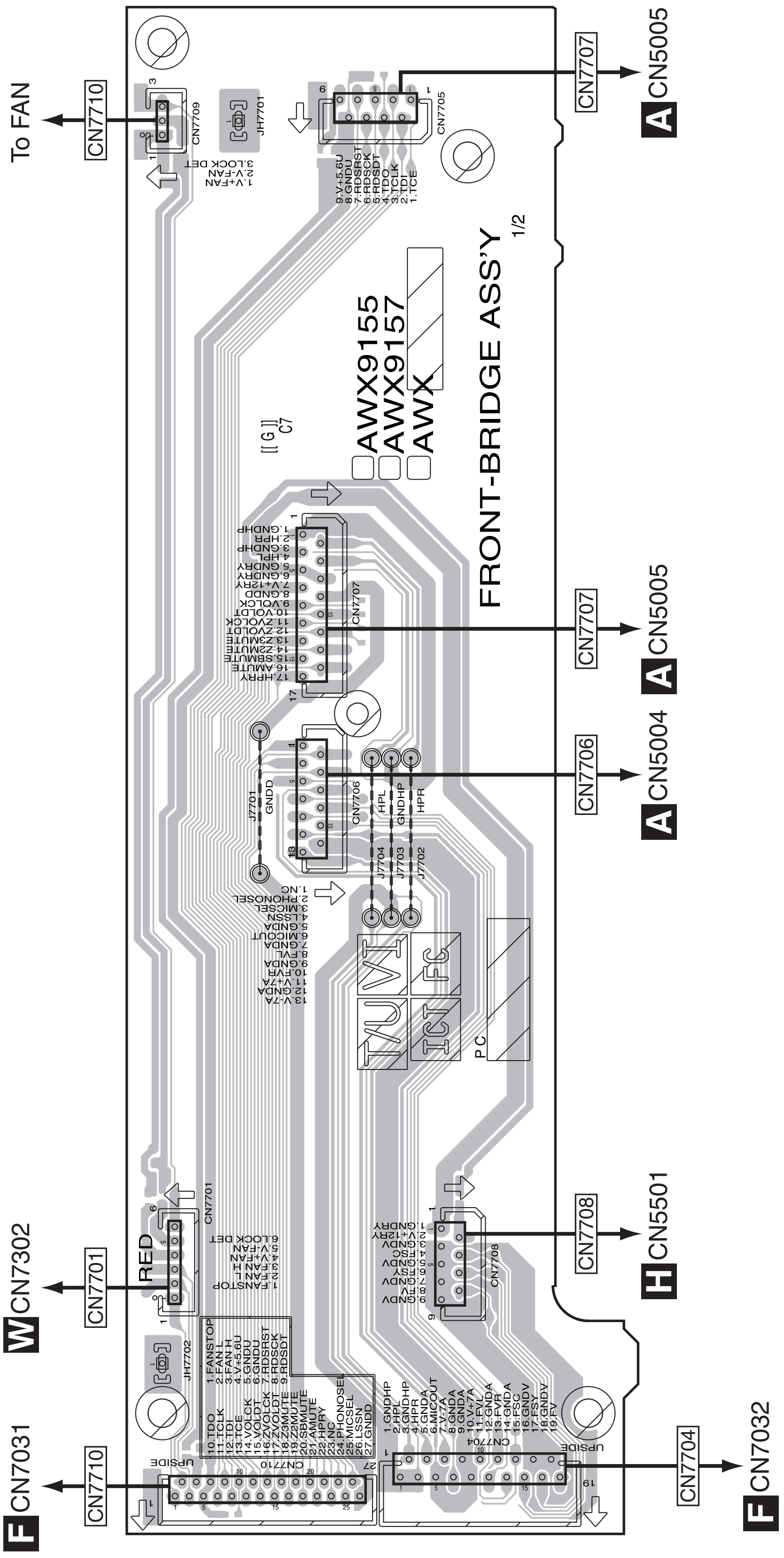

CN6504
CN6502
CN6503
CN6501
GNDA
MUTEA
SBL OUT
SBR OUT
LS OUT
RS OUT
C OUT
SW OUT
FL OUT
FR OUT
MUTESB
AWX9
A_ASBROUTJ
A_ASBLOUTJ
A_ALSOUTJ
A_ARSOUTJ
A_ACOUTJ
A_ALFEOUTJ
A_ALOUTJ
A_AROUTJ
GNDCH
GNDCHA
D6507
D6508
C6544
C6545
C6648
C6649
R6735
R6736
R6732
R6734
R6730
R6731
R6728
R6729
R6540
R6539
R6528
R6527
R6516
R6515
R6504
R6503
A_VCINDVR2
A_VVIN DVR2
C6718
R6588
R6589
R6587
A_VYIN DVR2
GNDV
A_VCOUT_DVR2
A_VVOUT_DVR2
A_VYOUT _DVR2
C6717
A_VCINDVR1
A_VVIN DVR1
A_VYIN DVR1
R6585
R6586
R6584
A_VCOUT_DVR1
A_VVOUT_DVR1
A_VYOUT_DVR1
C6719
A_VCINVIDEO1
A_VVIN VIDEO1
A_VYIN VIDEO1
R6591
R6592
R6590
C6720
A_VCINTV
A_VVINTV
A_VYINTV
R6594
R6595
R6593
C6721
A_VCINBD
A_VVINBD
A_VYINBD
R6597
R6598
R6596
R6600
C6722
R6601
R6599
A_VCINDVD
A_VVINDVD
A_VYINDVD
A_VCOUT _MONITOR
A_VVOUT _MONITOR
A_VYOUT _MONITOR
A_VVOUT_ZONE2
A_VVOUT_ZONE3
C6564
C6562
C6565
C6563
C6560
C6561
C6585
C6584
C6576
R6683
R6682
R6687
R6651
C6599
GNDV
V-5.6V
V+5.6V
V+12RY
VZ2 MUTE
S-DET
HEXP OE
HEXP CLK
V+5HDMI
SC OUT
SY OUT
SC IN
SY IN
C'SITEOUT
C'SITE IN
ZOSD C'SITE OUT
VZ3 MUTE
V MUTE
HEXP ST
HEXP DT
GND HDMI
C6507
C6508
C6660
D6503
D6502
C6661
C6503
C6504
R6677
C6506
C6505
R6678
C6657
C6656
C6501
C6502
C6654
C6652
R6716
R6717
C6510
V+12RY
GNDF
C6696
D6504
C6509
C6698
IC6516
R6700
R6699
C6705
C6697
PSC
PSY
FV
R6718
R6710
R6701
R6713
R6640
R6642
R6668
R6643
R6667
R6689
R6641
R6665
R6666
R6645
R6639
R6664
R6644
R6635
R6637
R6638
R6552
R6671
R6670
R6669
R6672
R6636
R6673
R6674
R6690
R6549
R6551
R6550

(ANP7652-C)

11.9 FRONT BRIDGE ASSY

SIDE A **SIDE A**

I FRONT BRIDGE ASSY

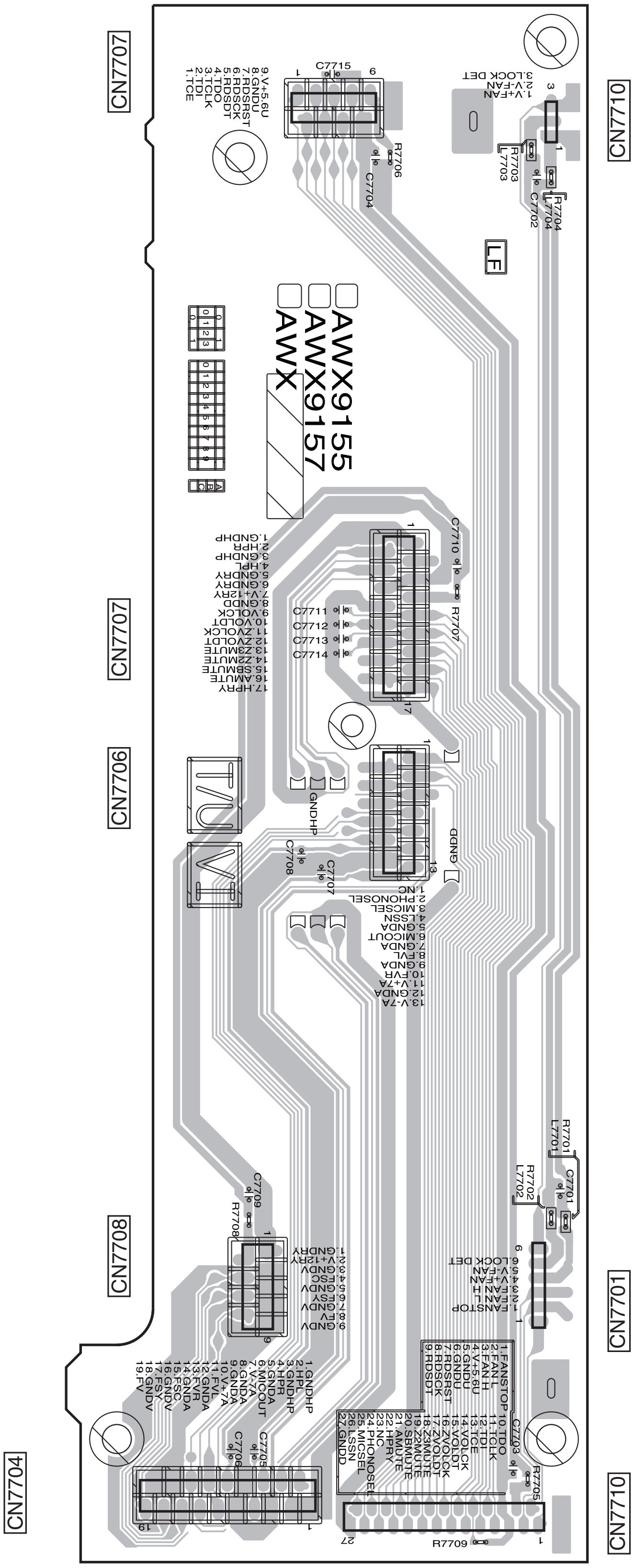

To FAN
CN7710
CN7709
1.V+FAN
2.V-FAN
3.LOCK DET
JH7701
CN7705
9.V+5.6U
8.GNDU
7.RDSRST
6.RDSCK
5.RDSDT
4.TDO
3.TCLK
2.TDI
1.TCE
CN7707
A CN5005
AWX9155
AWX9157
AWX
FRONT-BRIDGE ASS'Y
1/2
[G] C7
1.GNDHP
2.HPR
3.GNDHP
4.HPL
5.GNDRY
6.GNDRY
7.V+12RY
8.GND
9.VOLCK
10.VOLDT
11.ZVOLCK
12.ZVOLDT
13.Z3MUTE
14.Z2MUTE
15.SBMUTE
16.AMUTE
17.HPRY
CN7707
A CN5005
J7701
GNDD
CN7706
HPL
GNDHP
HPR
J7704
J7703
J7702
CN7706
A CN5004
1.NC
2.PHONOSEL
3.MICSEL
4.LSSN
5.GNDA
6.MICOUT
7.GNDA
8.FVL
9.GNDA
10.FVR
11.V+7A
12.GNDA
13.V-7A
PC
CN7708
1.GNDRY
2.V+12RY
3.GNDV
4.FSV
5.GNDV
6.FSY
7.GNDV
8.FV
9.GNDV
CN7708
H CN5501
CN7701
RED
6.LOCK DET
5.V-FAN
4.V+FAN
3.FAN H
2.FAN L
1.FANSTOP
CN7701
W CN7302
JH7702
1.FANSTOP
2.FAN L
3.FAN H
4.V+5.6U
5.GNDU
6.GNDU
7.RDSRST
8.RDSCK
9.RDSDT
10.TDO
11.TCLK
12.TDI
13.TCE
14.VOLCK
15.VOLDT
16.ZVOLCK
17.ZVOLDT
18.Z3MUTE
19.Z2MUTE
20.SBMUTE
21.AMUTE
22.HPRY
23.NC
24.PHONOSEL
25.MICSEL
26.LSSN
27.GNDD
CN7710
UPSIDE
CN7710
F CN7031
1.GNDHP
2.HPL
3.GNDHP
4.HPR
5.GNDA
6.MICOUT
7.V-7A
8.GNDA
9.GNDA
10.V+7A
11.FVL
12.GNDA
13.FVR
14.GNDA
15.FSO
16.GNDV
17.FSY
18.GNDV
19.FV
CN7704
UPSIDE
CN7704
F CN7032

(ANP7654-B)

I **I**

SIDE B **SIDE B**

I FRONT BRIDGE ASSY

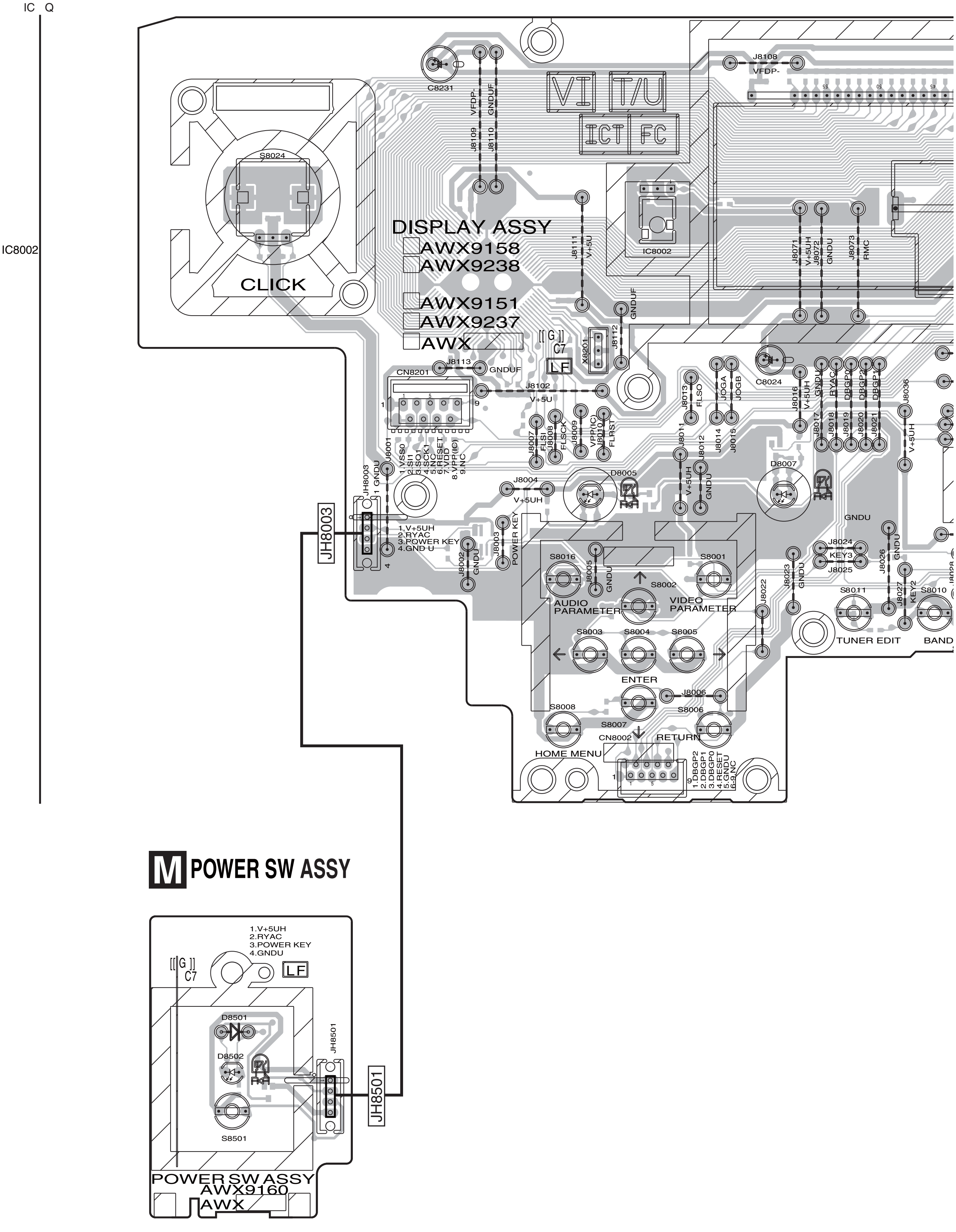

CN7707
CN7710
CN7706
CN7708
CN7704
CN7701
CN7710
AWX9155
AWX9157
AWX
LF
1.TCE
2.TDI
3.TCLK
4.TDO
5.RDSDT
6.RDSCK
7.RDSRST
8.GNDU
9.V+5.6U
1.V+FAN
2.V-FAN
3.LOCK DET
1.GNDHP
2.HPR
3.GNDHP
4.HPL
5.GNDRY
6.GNDRY
7.V+12RY
8.GNDD
9.VOLCK
10.VOLDT
11.ZVOLCK
12.ZVOLDT
13.Z3MUTE
14.Z2MUTE
15.SBMUTE
16.AMUTE
17.HPRY
1.NC
2.PHONOSEL
3.MICSEL
4.LSSN
5.GNDA
6.MICOUT
7.GNDA
8.FVL
9.GNDA
10.FVR
11.V+7A
12.GNDA
13.V-7A
GNDHP
GNDD
1.GNDRY
2.V+12RY
3.GNDV
4.FSC
5.GNDV
6.FSY
7.GNDV
8.FV
9.GNDV
1.FANSTOP
2.FAN L
3.FAN H
4.V+FAN
5.V-FAN
6.LOCK DET
1.GNDHP
2.HPL
3.GNDHP
4.HPR
5.GNDA
6.MICOUT
7.V-7A
8.GNDA
9.GNDA
10.V+7A
11.FVL
12.GNDA
13.FVR
14.GNDA
15.FSC
16.GNDV
17.FSY
18.GNDV
19.FV
1.FANSTOP
2.FAN L
3.FAN H
4.V+FAN
5.GNDU
6.GNDU
7.RDSRST
8.RDSCK
9.RDSDT
10.TDO
11.TCLK
12.TDI
13.TCE
14.VOLCK
15.VOLDT
16.ZVOLCK
17.ZVOLDT
18.Z3MUTE
19.Z2MUTE
20.SBMUTE
21.AMUTE
22.HPRY
23.NC
24.PHONOSEL
25.MICSEL
26.LSSN
27.GNDD
C7701
C7702
C7703
C7704
C7705
C7706
C7707
C7708
C7709
C7710
C7711
C7712
C7713
C7714
C7715
R7701
R7702
R7703
R7704
R7705
R7706
R7707
R7708
R7709
L7701
L7702
L7703
L7704

(ANP7654-B)

11.10 DISPLAY, POWER SW and VOL ASSYS

SIDE A

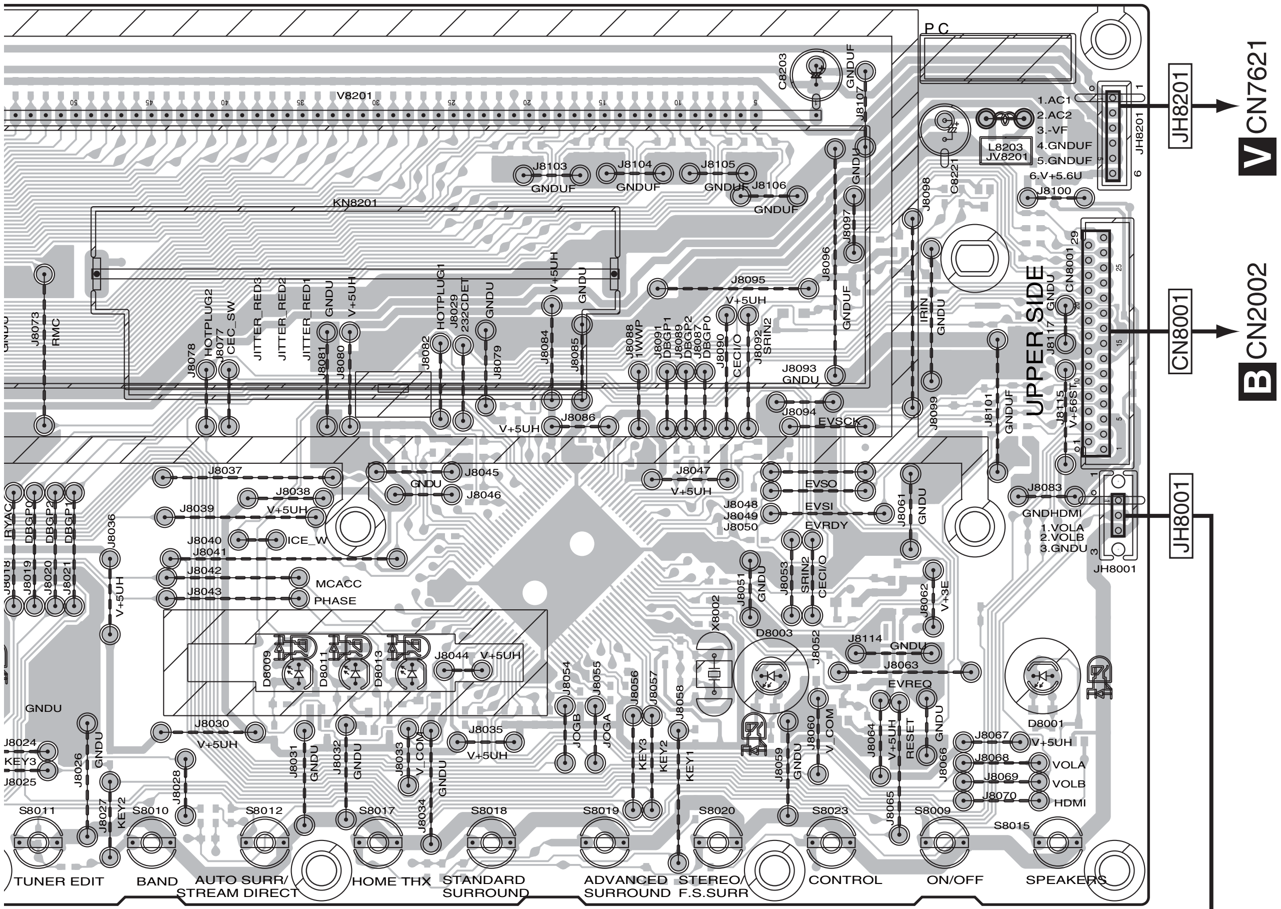
K DISPLAY ASSY


IC Q
IC8002
S8024
CLICK
C8231
VFDP-
GNDUF
J8109
J8110
VI
T/U
ICT
FC
J8108
VFDP-
DISPLAY ASSY
AWX9158
AWX9238
AWX9151
AWX9237
AWX
J8111
V+5U
IC8002
J8071
V+5UH
J8072
GNDU
J8073
RMC
GNDUF
J8112
X8201
[[G]]
C7
LF
J8113
GNDUF
CN8201
J8102
V+5U
1
9
J8001
1.VSS0
2.SI1
3.SO1
4.SCK1
5.NC
6.RESET
7.VDD
8.VPP(IC)
9.NC
J8007
FLSI
J8008
FLSCK
J8009
VPP(IC)
J8010
FLRST
J8013
FLSO
J8011
V+5UH
J8012
GNDU
JOGA
JOGB
J8014
J8015
C8024
J8016
V+5UH
GNDU
RYAC
DBGP0
DBGP2
DBGP1
J8017
J8018
J8019
J8020
J8021
J8036
V+5UH
JH8003
1 GNDU
J8004
V+5UH
D8005
D8007
GNDU
JH8003
1.V+5UH
2.RYAC
3.POWER KEY
4.GND U
4
J8002
GNDU
J8003
POWER KEY
S8016
J8005
GNDU
S8002
S8001
AUDIO PARAMETER
VIDEO PARAMETER
J8022
J8023
GNDU
J8024
KEY3
J8025
J8026
GNDU
J8027
KEY2
S8011
S8010
TUNER EDIT
BAND
S8003
S8004
S8005
ENTER
J8006
S8006
S8008
S8007
CN8002
RETURN
HOME MENU
1
9
1.DBGP2
2.DBGP1
3.DBGP0
4.RESET
5.GNDU
6-9.NC
M POWER SW ASSY
1.V+5UH
2.RYAC
3.POWER KEY
4.GNDU
[[G]]
C7
LF
D8501
D8502
JH8501
JH8501
S8501
POWER SW ASSY
AWX9160
AWX

(ANP7655-B)

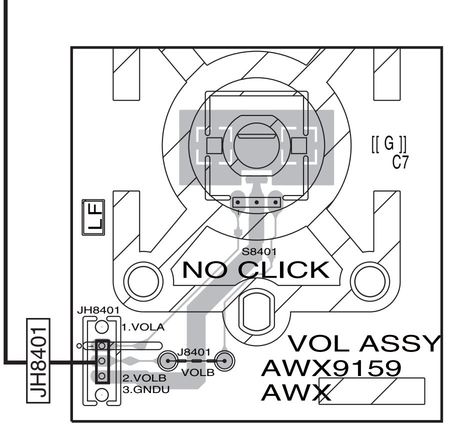
K M L

SIDE A


JH8201
V CN7621
1.AC1
2.AC2
3.-VF
4.GNDUF
5.GNDUF
6.V+5.6U
L8203
JV8201
C8203
C8221
V8201
KN8201
P C
J8103
J8104
J8105
J8106
GNDUF
J8100
J8107
UPPER SIDE
CN8001
B CN2002
J8117
J8115
V+56ST
J8101
J8098
J8099
IRIN
GNDU
J8097
J8096
J8095
V+5UH
J8093
J8094
EVSCK
J8092
SRIN2
J8090
CECI/O
J8088
1WWP
DBGP1
DBGP2
DBGP0
J8084
J8085
J8086
V+5UH
J8082
HOTPLUG1
J8029
232CDET
J8079
J8081
J8080
JITTER_RED1
JITTER_RED2
JITTER_RED3
J8078
HOTPLUG2
J8077
CEC_SW
J8073
RMC
J8083
GNDHDMI
JH8001
1.VOLA
2.VOLB
3.GNDU
J8037
J8038
J8039
J8040
ICE_W
J8041
J8042
MCACC
J8043
PHASE
J8045
J8046
J8047
J8048
J8049
J8050
EVSO
EVSI
EVRDY
J8061
J8051
J8053
SRIN2
CECI/O
J8062
V+3E
J8036
J8019
J8020
J8021
D8009
D8011
D8013
J8044
V+5UH
X8002
D8003
J8052
J8114
J8063
EVREQ
D8001
J8054
J8055
J8056
J8057
J8058
JOGB
JOGA
KEY3
KEY2
KEY1
J8059
J8060
V_COM
J8064
RESET
J8066
J8067
J8068
J8069
J8070
VOLA
VOLB
HDMI
J8065
J8030
J8031
J8032
J8033
J8034
J8035
J8024
J8025
J8026
J8027
J8028
GNDU
S8011
S8010
S8012
S8017
S8018
S8019
S8020
S8023
S8009
S8015
TUNER EDIT
BAND
AUTO SURR/
STREAM DIRECT
HOME THX
STANDARD
SURROUND
ADVANCED
SURROUND
STEREO/
F.S.SURR
CONTROL
ON/OFF
SPEAKERS

(ANP7655-B)

L VOL ASSY


JH8001
JH8401
JH8401
1.VOLA
2.VOLB
3.GNDU
J8401
VOLB
S8401
NO CLICK
LF
[[G]]
C7
VOL ASSY
AWX9159
AWX

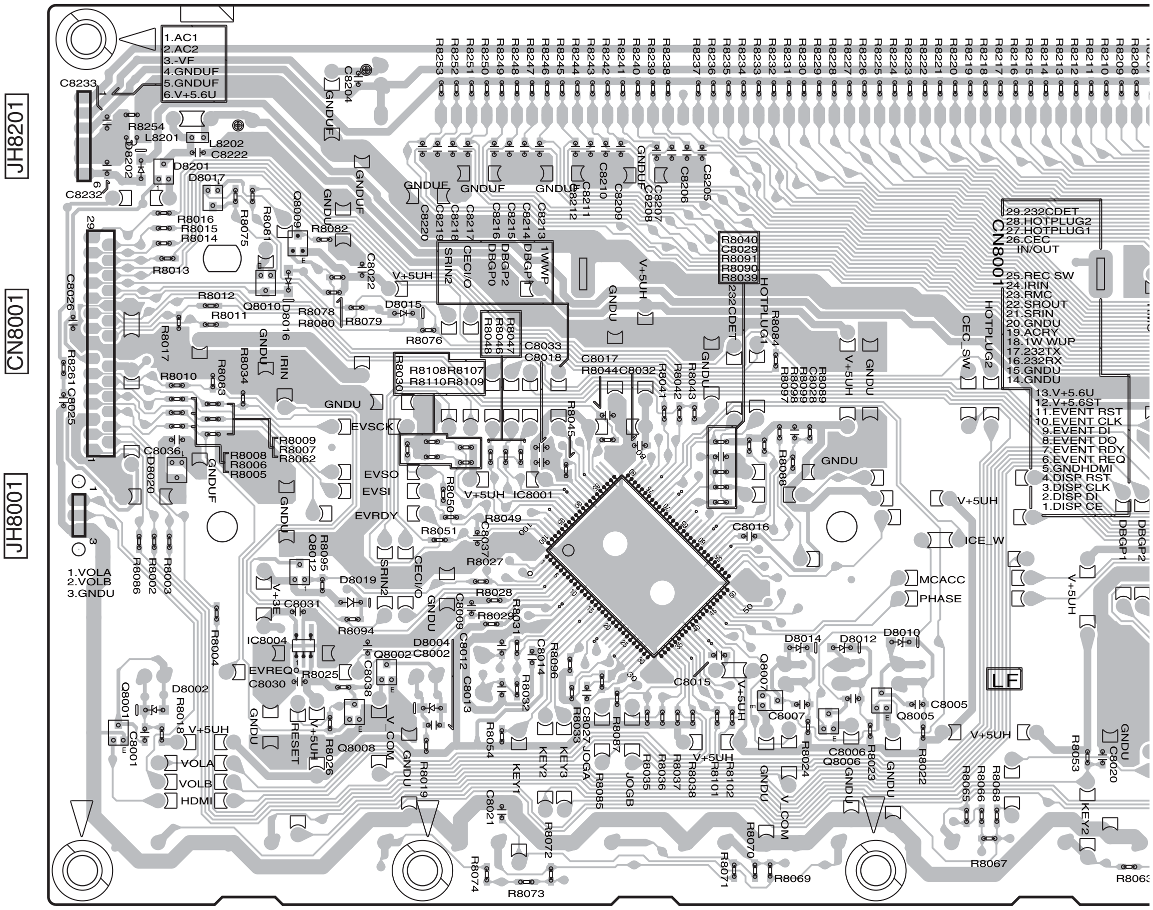
(ANP7655-B)

L M K

SIDE B

K DISPLAY ASSY

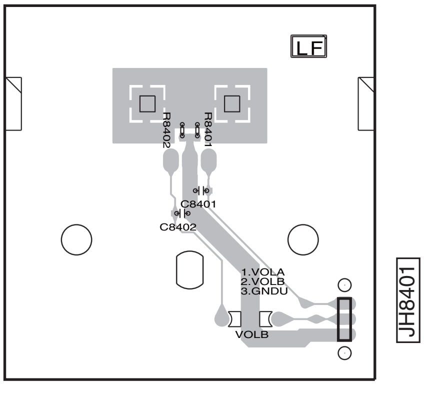
IC	Q
	Q8009
IC8201	
	Q8010
IC8001	
	Q8012
	Q8004
IC8004	Q8002 Q8003 Q8007
IC8003	Q8001 Q8005
	Q8008 Q8006



1.AC1
2.AC2
3.-VF
4.GNDUF
5.GNDUF
6.V+5.6U
JH8201
CN8001
JH8001
1.VOLA
2.VOLB
3.GNDU
C8233
C8232
R8254
L8201
L8202
C8222
D8202
D8201
D8017
C8204
GNDUF
R8016
R8015
R8014
R8013
R8075
R8081
Q8009
R8082
R8012
R8011
Q8010
D8016
R8078
R8080
R8079
D8015
R8076
C8022
V+5UH
R8017
R8010
R8034
R8083
IRIN
GNDU
C8026
R8261
C8025
C8036
D8020
R8008
R8006
R8005
R8009
R8007
R8062
EVSCK
EVSO
EVSI
EVRDY
V+5UH
IC8001
R8050
R8051
C8037
R8027
R8049
R8028
R8029
R8031
D8019
Q8012
R8095
SRIN2
CECI/O
C8031
R8094
IC8004
EVREQ
C8030
R8025
C8038
Q8002
D8004
C8002
C8012
C8013
C8009
C8014
R8096
R8032
R8033
C8027
JOGA
JOGB
R8087
R8085
R8035
R8036
R8037
R8038
R8101
R8102
V+5UH
KEY1
KEY2
KEY3
R8054
C8021
R8072
R8073
R8074
R8019
V_COM
Q8008
R8026
RESET
VOLA
VOLB
HDMI
D8002
R8018
Q8001
C8001
R8004
R8086
R8002
R8003
R8108
R8107
R8110
R8109
R8030
R8047
R8046
R8048
C8033
C8018
C8017
R8044
C8032
R8045
R8041
R8042
R8043
R8040
C8029
R8091
R8090
R8039
232CDET
HOTPLUG1
R8084
R8089
R8099
R8098
R8097
R8088
CEC_SW
HOTPLUG2
C8016
C8015
D8014
D8012
D8010
Q8007
C8007
C8005
Q8005
C8006
Q8006
R8024
R8023
R8022
R8070
R8071
R8069
R8065
R8066
R8068
R8067
R8053
C8020
KEY2
R8063
MCACC
PHASE
ICE_W
V+5UH
LF
DBGP1
DBGP2
DBGP0
1WWP
C8213
C8214
C8215
C8216
C8217
C8218
C8219
C8212
C8211
C8210
C8209
C8208
C8207
C8206
C8205
29.232CDET
28.HOTPLUG2
27.HOTPLUG1
26.CEC IN/OUT
25.REC SW
24.IRIN
23.RMC
22.SROUT
21.SRIN
20.GNDU
19.ACRY
18.1W WUP
17.232TX
16.232RX
15.GNDU
14.GNDU
13.V+5.6U
12.V+5.6ST
11.EVENT RST
10.EVENT CLK
9.EVENT DI
8.EVENT DO
7.EVENT RDY
6.EVENT REQ
5.GNDHDMI
4.DISP RST
3.DISP CLK
2.DISP DI
1.DISP CE
R8253
R8252
R8251
R8250
R8249
R8248
R8247
R8246
R8245
R8244
R8243
R8242
R8241
R8240
R8239
R8238
R8237
R8236
R8235
R8234
R8233
R8232
R8231
R8230
R8229
R8228
R8227
R8226
R8225
R8224
R8223
R8222
R8221
R8220
R8219
R8218
R8217
R8216
R8215
R8214
R8213
R8212
R8211
R8210
R8209
R8208

L VOL ASSY

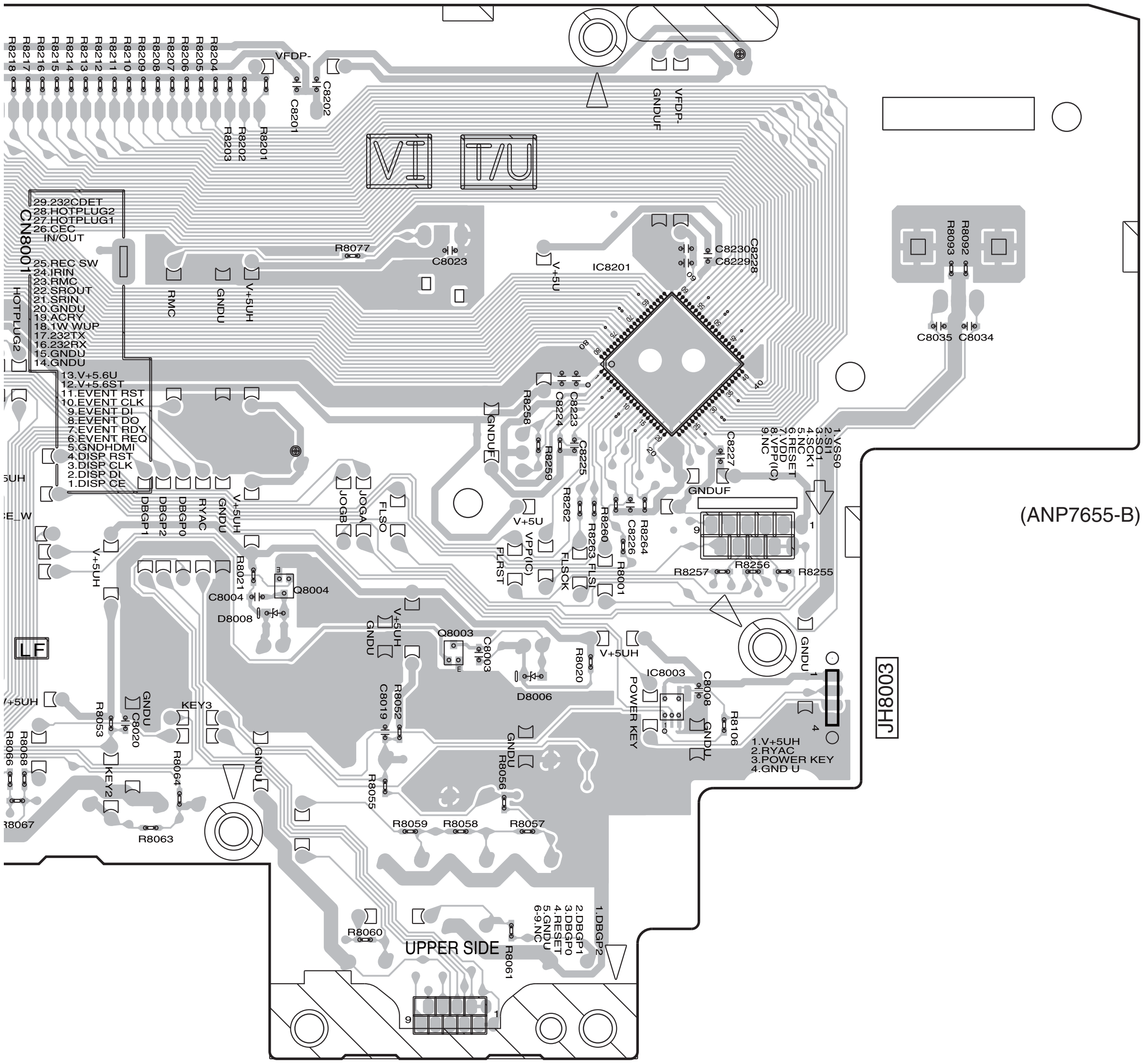
IC	Q
	Q8501



LF
R8402
R8401
C8401
C8402
1.VOLA
2.VOLB
3.GNDU
VOLB
JH8401

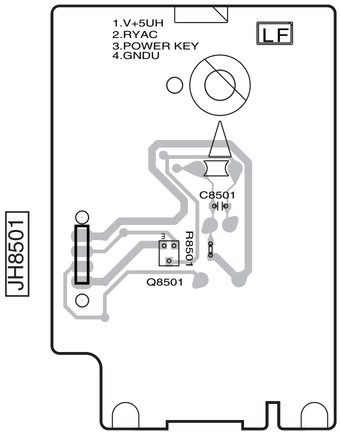
(ANP7655-B)

SIDE B


VI
T/U
CN8001
29.232CDET
28.HOTPLUG2
27.HOTPLUG1
26.CEC IN/OUT
25.REC SW
24.IRIN
23.RMC
22.SROUT
21.SRIN
20.GNDU
19.ACRY
18.1W WUP
17.232TX
16.232RX
15.GNDU
14.GNDU
13.V+5.6U
12.V+5.6ST
11.EVENT RST
10.EVENT CLK
9.EVENT DI
8.EVENT DO
7.EVENT RDY
6.EVENT REQ
5.GNDHDMI
4.DISP RST
3.DISP CLK
2.DISP DI
1.DISP CE
IC8201
IC8003
Q8003
Q8004
D8006
D8008
JH8003
1.V+5UH
2.RYAC
3.POWER KEY
4.GND U
1.VSS0
2.SI1
3.SO1
4.SCK1
5.NC
6.RESET
7.VDD
8.VPP(IC)
9.NC
1.DBGP2
2.DBGP1
3.DBGP0
4.RESET
5.GNDU
6-9.NC
UPPER SIDE
LF
VFDP-
GNDUF
V+5U
V+5UH
GNDU
RMC
HOTPLUG2
DBGP1
DBGP2
DBGP0
RYAC
JOGA
JOGB
FLSO
FLSI
FLSCK
FLRST
VPP(IC)
POWER KEY
KEY2
KEY3
C8023
C8201
C8202
C8223
C8224
C8225
C8226
C8227
C8228
C8229
C8230
C8034
C8035
C8003
C8004
C8008
C8019
C8020
R8001
R8020
R8021
R8052
R8053
R8055
R8056
R8057
R8058
R8059
R8060
R8061
R8063
R8064
R8066
R8067
R8068
R8077
R8092
R8093
R8106
R8201
R8202
R8203
R8204
R8205
R8206
R8207
R8208
R8209
R8210
R8211
R8212
R8213
R8214
R8215
R8216
R8217
R8218
R8255
R8256
R8257
R8258
R8259
R8260
R8262
R8263
R8264

(ANP7655-B)

M POWER SW ASSY


1.V+5UH
2.RYAC
3.POWER KEY
4.GNDU
LF
C8501
R8501
Q8501
JH8501

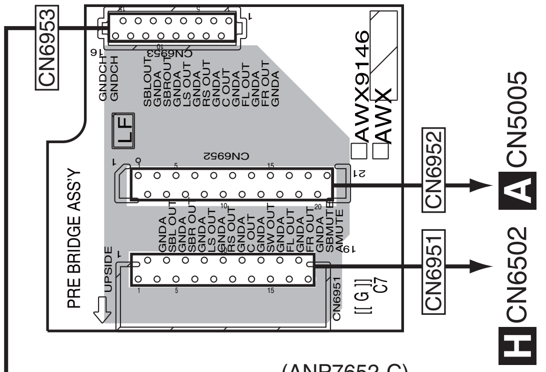
(ANP7655-B)

L M K

11.11 PRE BRIDGE, ICE BUFFER and ICE SHIELD ASSYS

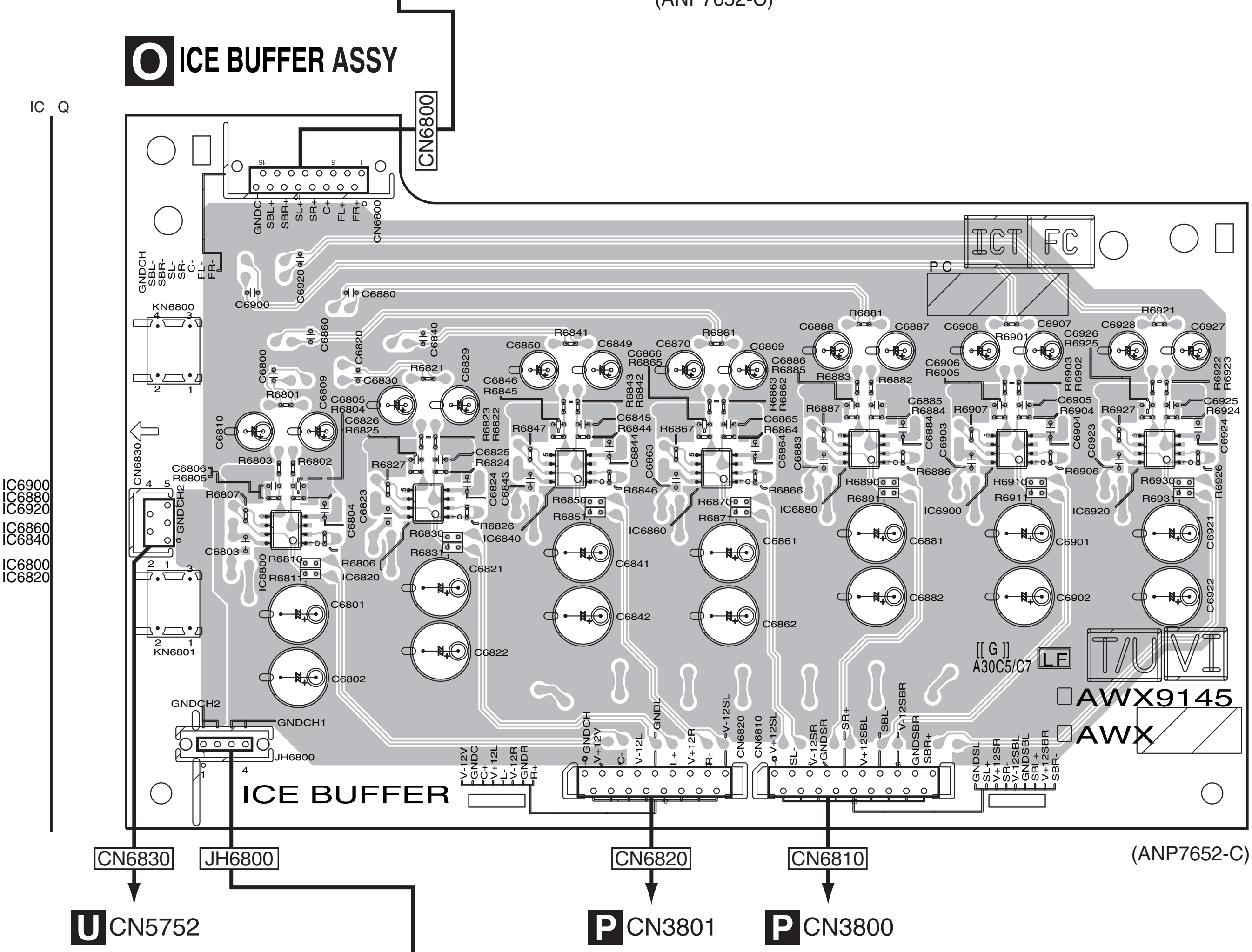
SIDE A **SIDE A**

N PRE BRIDGE ASSY


CN6953
CN6953
GNDCH
GNDCH
SBLOUT
GNDA
SBROUT
GNDA
LS OUT
GNDA
RS OUT
GNDA
C OUT
GNDA
FL OUT
GNDA
FR OUT
GNDA
AWX9146
AWX
LF
PRE BRIDGE ASS'Y
UPSIDE
CN6952
CN6951
GNDA
SBL OUT
GNDA
SBR OUT
GNDA
LS OUT
GNDA
RS OUT
GNDA
C OUT
GNDA
SW OUT
GNDA
FL OUT
GNDA
FR OUT
GNDA
SBMUTE
AMUTE
[[G]]
C7
CN6952
CN6951
A CN5005
H CN6502

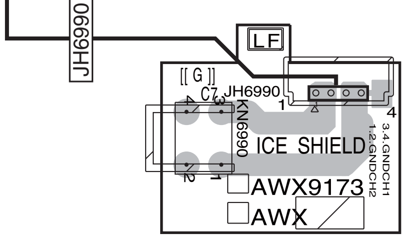
(ANP7652-C)

O ICE BUFFER ASSY


IC Q
CN6800
GNDC
SBL+
SBR+
SL+
SR+
C+
FL+
FR+
CN6800
GNDCH
SBL-
SBR-
SL-
SR-
C-
FL-
FR-
ICT
FC
PC
KN6800
KN6801
CN6830
GNDCH2
IC6900
IC6880
IC6920
IC6860
IC6840
IC6800
IC6820
IC6800
IC6820
IC6840
IC6860
IC6880
IC6900
IC6920
C6800
C6801
C6802
C6803
C6804
C6805
C6806
C6809
C6810
R6801
R6802
R6803
R6804
R6805
R6806
R6807
R6810
R6811
C6820
C6821
C6822
C6823
C6824
C6825
C6826
C6829
C6830
R6821
R6822
R6823
R6824
R6825
R6826
R6827
R6830
R6831
C6840
C6841
C6842
C6843
C6844
C6845
C6846
C6849
C6850
R6841
R6842
R6843
R6844
R6845
R6846
R6847
R6850
R6851
C6860
C6861
C6862
C6863
C6864
C6865
C6866
C6869
C6870
R6861
R6862
R6863
R6864
R6865
R6866
R6867
R6870
R6871
C6880
C6881
C6882
C6883
C6884
C6885
C6886
C6887
C6888
R6881
R6882
R6883
R6884
R6885
R6886
R6887
R6890
R6891
C6900
C6901
C6902
C6903
C6904
C6905
C6906
C6907
C6908
R6901
R6902
R6903
R6904
R6905
R6906
R6907
R6910
R6911
C6920
C6921
C6922
C6923
C6924
C6925
C6926
C6927
C6928
R6921
R6922
R6923
R6924
R6925
R6926
R6927
R6930
R6931
[[G]]
A30C5/C7
LF
T/U
VI
AWX9145
AWX
GNDCH2
GNDCH1
JH6800
ICE BUFFER
V-12V
GNDC
C+
V+12L
L-
V-12R
GNDR
R+
GNDCH
V+12V
C-
V-12L
GNDL
L+
V+12R
R-
V-12SL
CN6820
CN6810
V+12SL
SL-
V-12SR
GNDSR
SR+
V+12SBL
SBL-
V-12SBR
GNDSBR
SBR+
GNDSL
SL+
V+12SR
SR-
V-12SBL
GNDSBL
SBL+
V+12SBR
SBR-
CN6830
JH6800
CN6820
CN6810
U CN5752
P CN3801
P CN3800

(ANP7652-C)

R ICE SHIELD ASSY

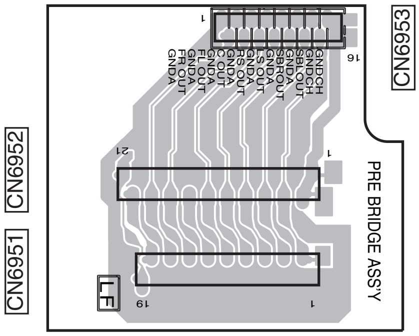

JH6990
LF
[[G]]
C7
JH6990
KN6990
ICE SHIELD
3,4:GNDCH1
1,2:GNDCH2
AWX9173
AWX

(ANP7652-C)

SIDE B

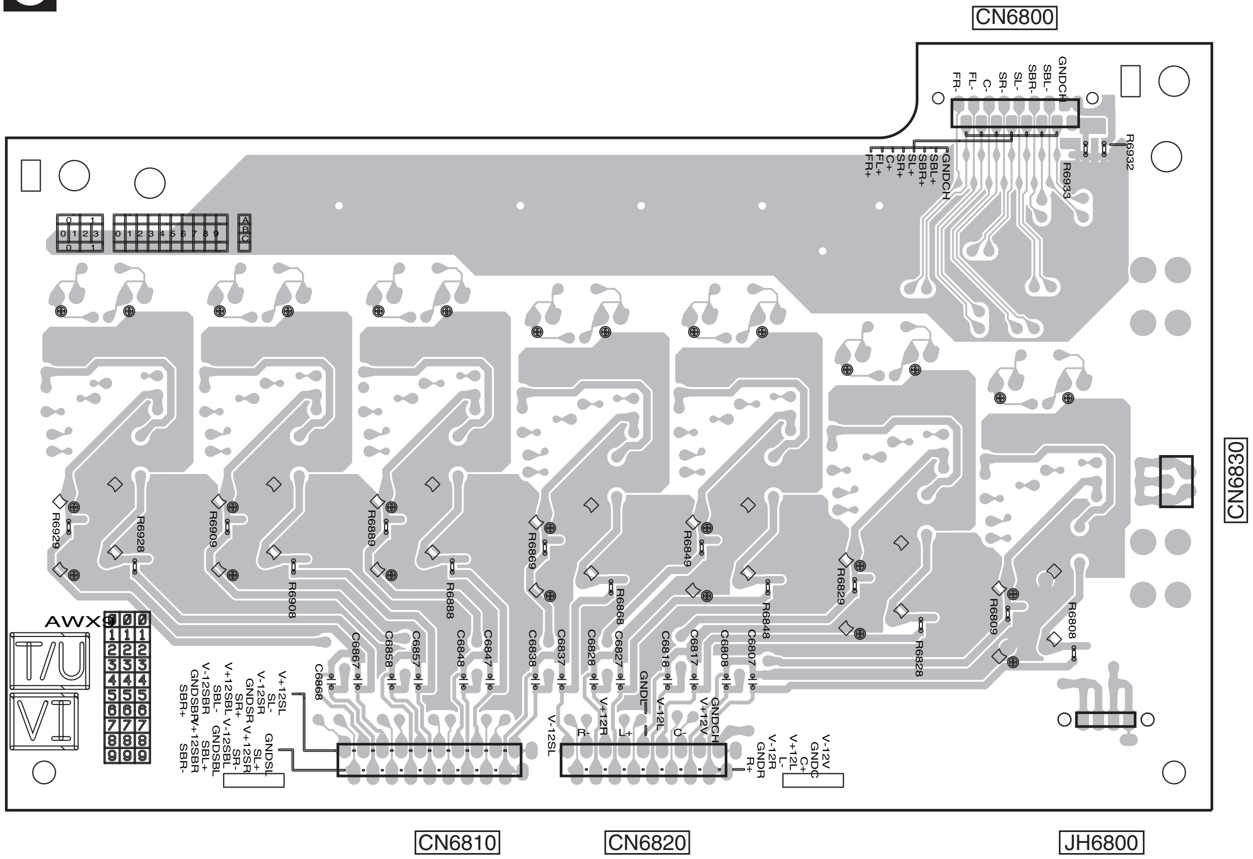
N PRE BRIDGE ASSY

SIDE B


CN6953
CN6952
CN6951
PRE BRIDGE ASS'Y
GNDCH
GNDCH
SBLOUT
SBROUT
GNDA
GNDA
S OUT
L OUT
GNDA
GNDA
RS OUT
C OUT
GNDA
GNDA
FL OUT
FR OUT
GNDA
GNDA
1
16
21
19
LF

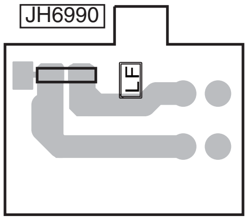
(ANP7652-C)

O ICE BUFFER ASSY


CN6800
CN6830
CN6810
CN6820
JH6800
GNDCH
SBL-
SBR-
SL-
SR-
C-
FL-
FR-
GNDCH
SBR+
SBL+
SL+
SR+
C+
FL+
FR+
R6932
R6933
AWX
T/U
VI
R6929
R6928
R6909
R6908
R6889
R6888
R6869
R6868
R6849
R6848
R6829
R6828
R6809
R6808
C6868
C6867
C6858
C6857
C6848
C6847
C6838
C6837
C6828
C6827
C6818
C6817
C6808
C6807
V+12SL
V-12SL
SL-
V-12SR
GNDSR
SR+
V+12SBL
SBL-
V-12SBR
GNDSBR
SBR+
GNDSL
SL+
V+12SR
SR-
V-12SBL
GNDSBL
SBL+
V+12SBR
SBR-
R-
V+12R
L+
GNDL
V-12L
C-
GNDCH
V+12V
V-12V
GNDC
C+
V+12L
L-
V-12R
GNDR
R+

(ANP7652-C)

R ICE SHIELD ASSY

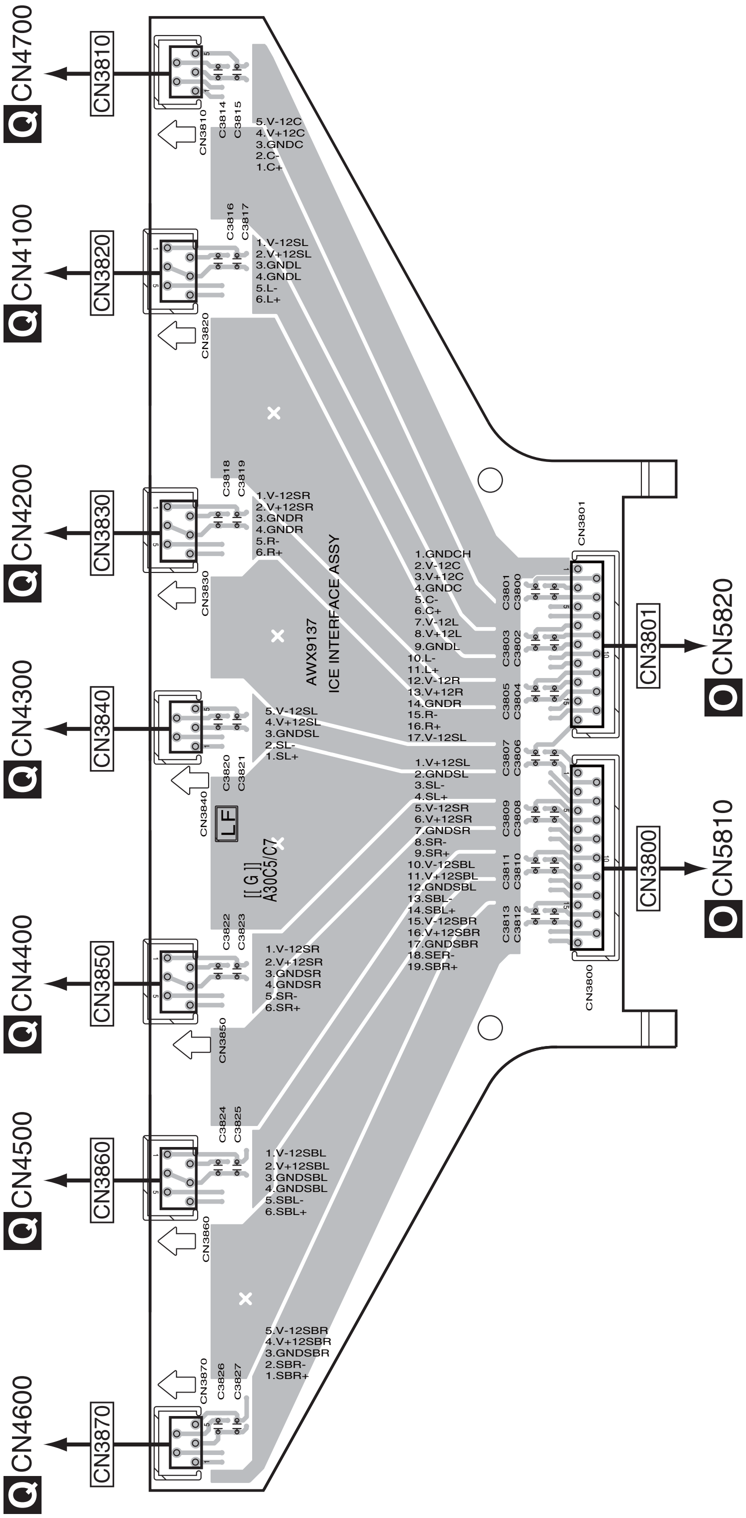


(ANP7652-C)

11.12 ICE INTERFACE ASSY

SIDE A **SIDE A**

P ICE INTERFACE ASSY


Q CN4700
CN3810
C3814
C3815
5.V-12C
4.V+12C
3.GNDC
2.C-
1.C+
Q CN4100
CN3820
C3816
C3817
1.V-12SL
2.V+12SL
3.GNDL
4.GNDL
5.L-
6.L+
Q CN4200
CN3830
C3818
C3819
1.V-12SR
2.V+12SR
3.GNDR
4.GNDR
5.R-
6.R+
ICE INTERFACE ASSY
AWX9137
Q CN4300
CN3840
5.V-12SL
4.V+12SL
3.GNDSL
2.SL-
1.SL+
C3820
C3821
LF
[[G]]
A30C5/C7
Q CN4400
CN3850
C3822
C3823
1.V-12SR
2.V+12SR
3.GNDSR
4.GNDSR
5.SR-
6.SR+
Q CN4500
CN3860
C3824
C3825
1.V-12SBL
2.V+12SBL
3.GNDSBL
4.GNDSBL
5.SBL-
6.SBL+
Q CN4600
CN3870
C3826
C3827
5.V-12SBR
4.V+12SBR
3.GNDSBR
2.SBR-
1.SBR+
1.GNDCH
2.V-12C
3.V+12C
4.GNDC
5.C-
6.C+
7.V-12L
8.V+12L
9.GNDL
10.L-
11.L+
12.V-12R
13.V+12R
14.GNDR
15.R-
16.R+
17.V-12SL
C3801
C3800
C3803
C3802
C3805
C3804
CN3801
O CN5820
1.V+12SL
2.GNDSL
3.SL-
4.SL+
5.V-12SR
6.V+12SR
7.GNDSR
8.SR-
9.SR+
10.V-12SBL
11.V+12SBL
12.GNDSBL
13.SBL-
14.SBL+
15.V-12SBR
16.V+12SBR
17.GNDSBR
18.SER-
19.SBR+
C3807
C3806
C3809
C3808
C3811
C3810
C3813
C3812
CN3800
O CN5810

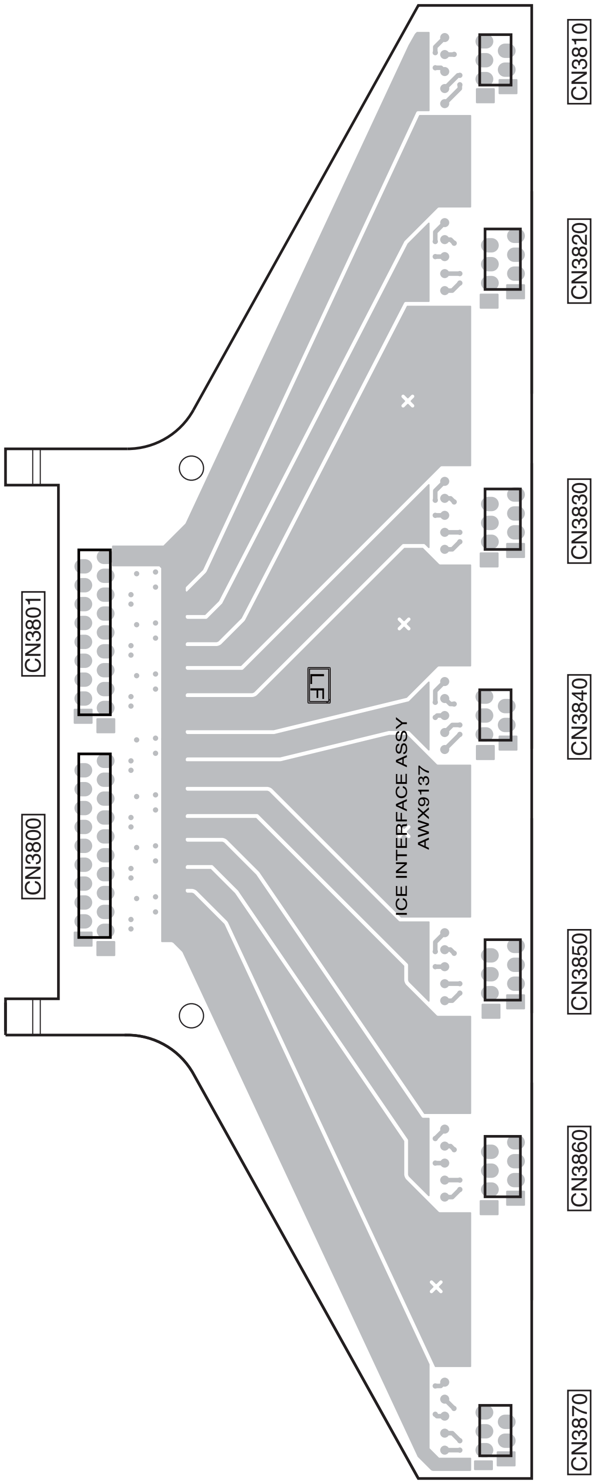
(ANP7649-B)

P **P**

SIDE B

SIDE B

P ICE INTERFACE ASSY


CN3810
CN3820
CN3830
CN3840
CN3850
CN3860
CN3870
CN3801
CN3800
LF
ICE INTERFACE ASSY
AWX9137

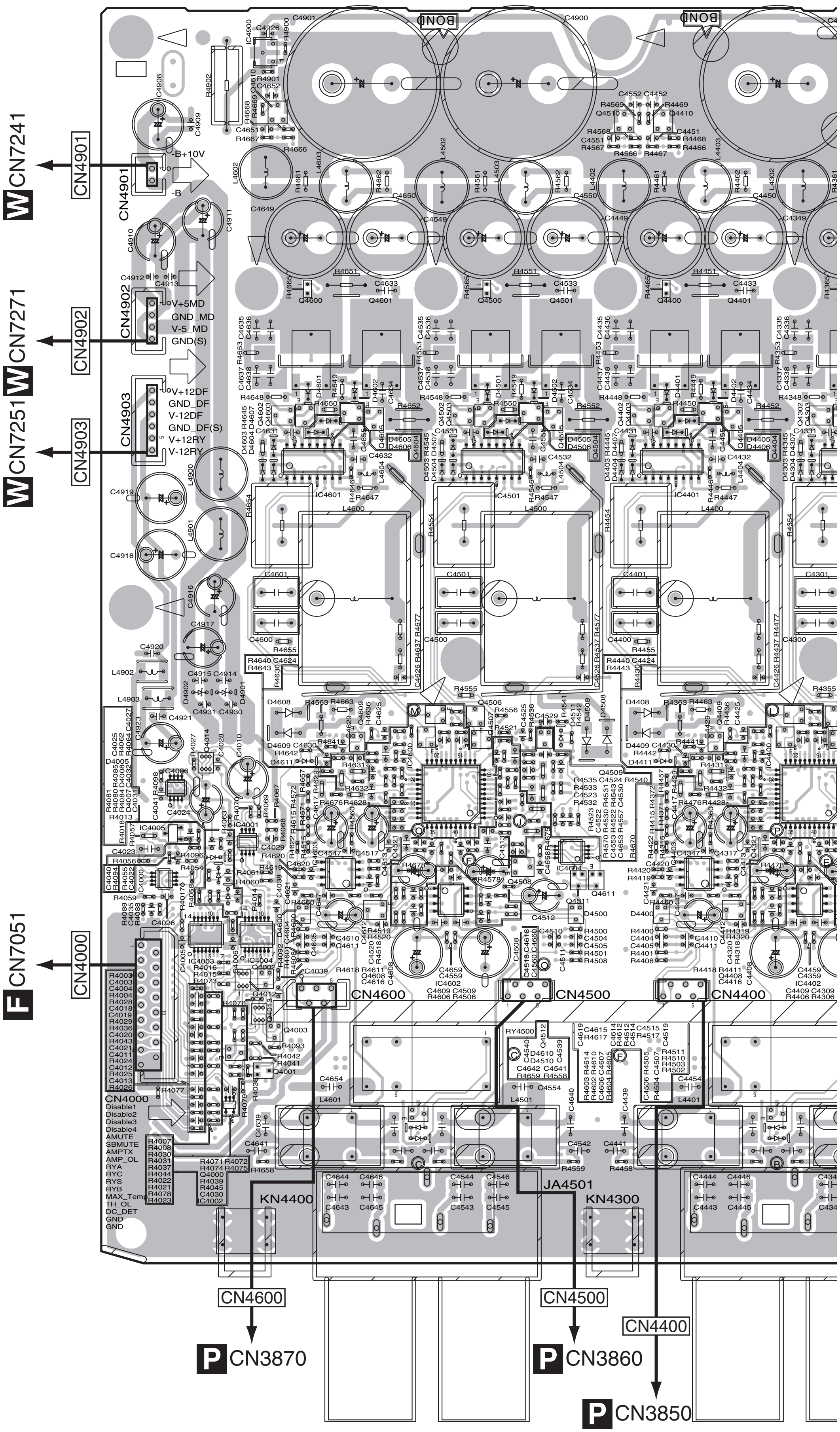
(ANP7649-B)

11.13 ICEPOWER AMP ASSY

SIDE A

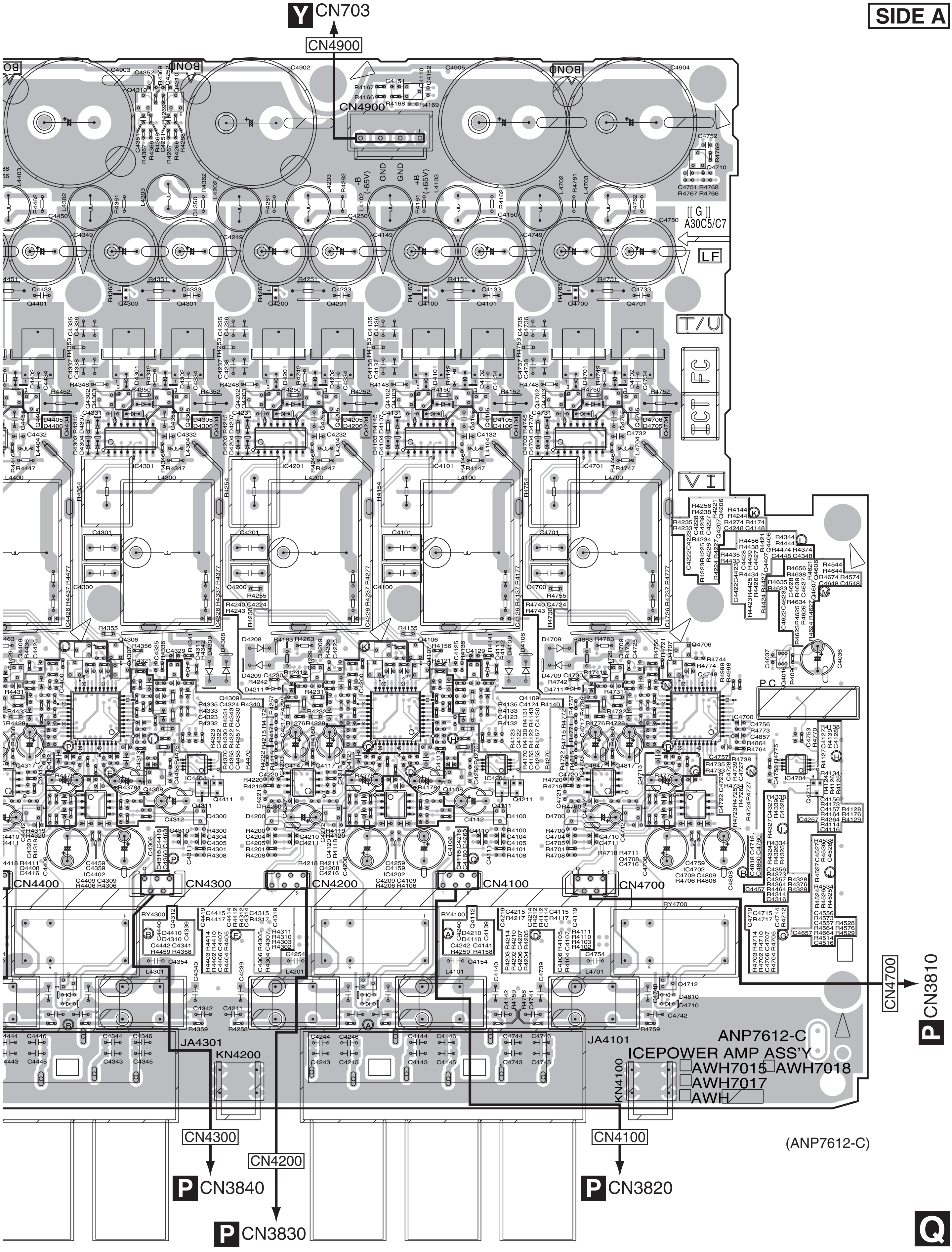
IC	Q
IC4900	Q4110 Q4210 Q4310
	Q4610
	Q4510 Q4410
	Q4710
	Q4500 Q4400 Q4300 Q4200 Q4100 Q4101 Q4700 Q4701 Q4501 Q4401 Q4301 Q4201 Q4601 Q4600
	Q4603 Q4602 Q4403 Q4202 Q4103 Q4502 Q4402 Q4303 Q4102 Q4702 Q4503 Q4302 Q4203 Q4703 Q4605 Q4505 Q4405 Q4305 Q4205 Q4105 Q4705 Q4304 Q4204 Q4104 Q4704 Q4604 Q4504 Q4404
IC4601 IC4401 IC4201 IC4101 IC4701 IC4501 IC4301	
	Q4206
	Q4207
	Q4406
	Q4407 Q4606
	Q4607
	Q4506 Q4306 Q4106 Q4707 Q4609 Q4409 Q4209 Q4709 Q4507 Q4307 Q4107 Q4706 Q4014 Q4016
IC4600 IC4400 IC4200	
IC4006	Q4509 Q4309 Q4109
IC4700	
IC4005 IC4001 IC4603 IC4203 IC4703 IC4403 IC4404 IC4204 IC4704 IC4604 IC4000	Q4508 Q4308 Q4108 Q4711 Q4611 Q4411 Q4211 Q4511 Q4311 Q4111
IC4003 IC4004 IC4602 IC4702 IC4402 IC4202	Q4002 Q4708 Q4608 Q4408 Q4208
	Q4012 Q4013
	Q4003 Q4512 Q4312 Q4112
	Q4001
	Q4712
	Q4000
IC4002	

Q ICEPOWER AMP ASSY



CN4901
W CN7241
-B+10V
-B
CN4902
W CN7271
V+5MD
GND_MD
V-5_MD
GND(S)
CN4903
W CN7251
V+12DF
GND_DF
V-12DF
GND_DF(S)
V+12RY
V-12RY
CN4000
F CN7051
CN4000
Disable1
Disable2
Disable3
Disable4
AMUTE
SBMUTE
AMPTX
AMP_OL
RYA
RYC
RYS
RYB
MAX_Temp
TH_OL
DC_DET
GND
GND
CN4600
CN4500
CN4400
KN4400
JA4501
KN4300
BOND
BOND
CN4600
P CN3870
CN4500
P CN3860
CN4400
P CN3850

SIDE A


Y CN703
CN4900
CN4900
-B (-65V)
GND
GND
+B (+65V)
[[G]] A30C5/C7
LF
T/U
FC
ICT
VI
PC
CN4400
CN4300
CN4200
CN4100
CN4700
CN4700
P CN3810
RY4300
RY4100
RY4700
JA4301
JA4101
KN4200
KN4100
IC4301
IC4201
IC4101
IC4701
L4400
L4300
L4200
L4100
L4700
ANP7612-C
ICEPOWER AMP ASS'Y
☐AWH7015 ☐AWH7018
☐AWH7017
☐AWH
(ANP7612-C)
CN4300
CN4200
CN4100
P CN3840
P CN3830
P CN3820

A
B
C
D
E
F

Q

SIDE B

Q ICEPOWER AMP ASSY

A

IC Q

B

C

D

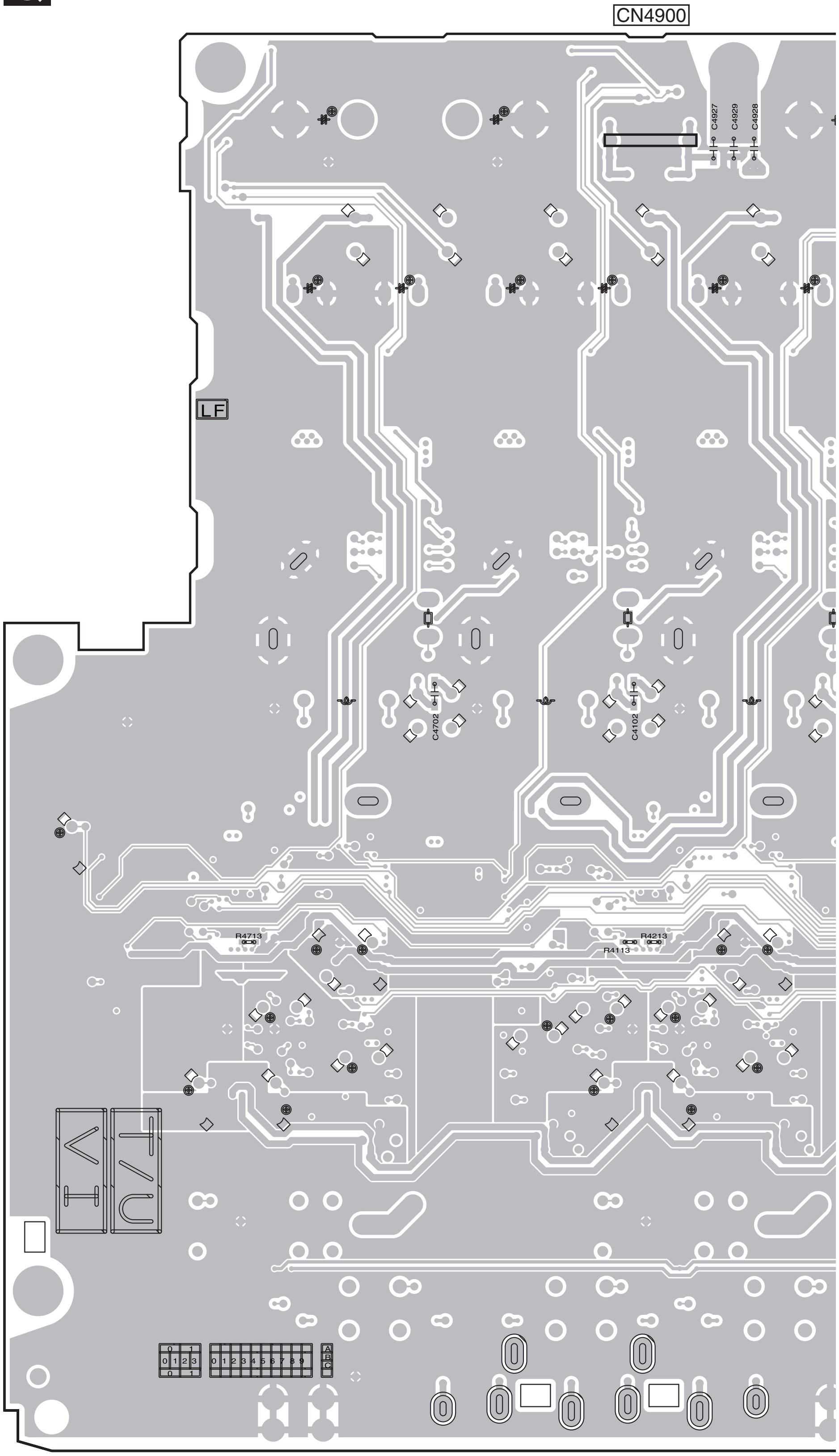
Q4015

E

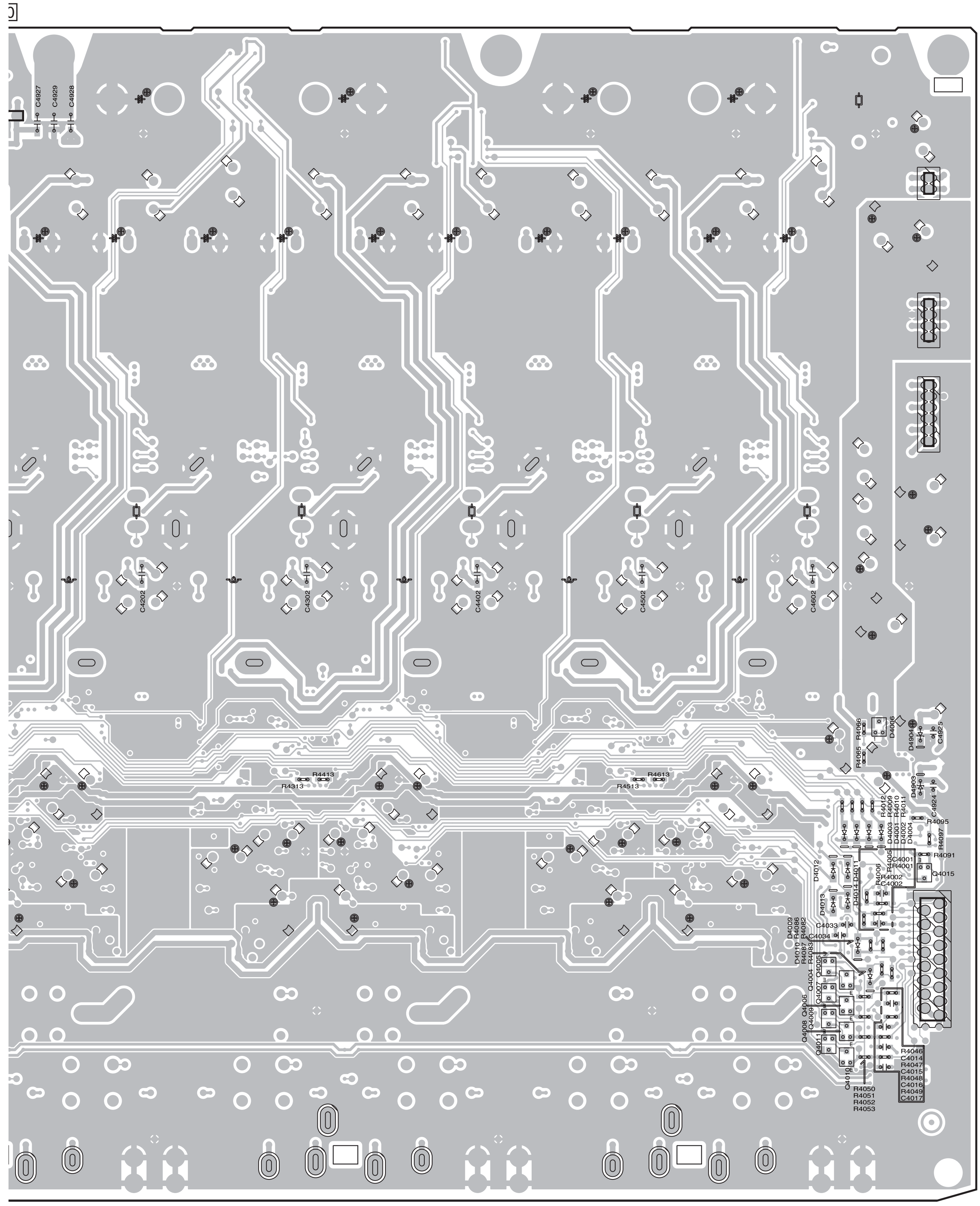
Q4004
Q4007
Q4006
Q4009 Q4011Q4005
Q4008

Q4010

F


CN4900
C4927
C4929
C4928
LF
C4702
C4102
R4713
R4213
R4113
0 1 2 3
0 1
0 1 2 3 4 5 6 7 8 9
A
B
C

SIDE B

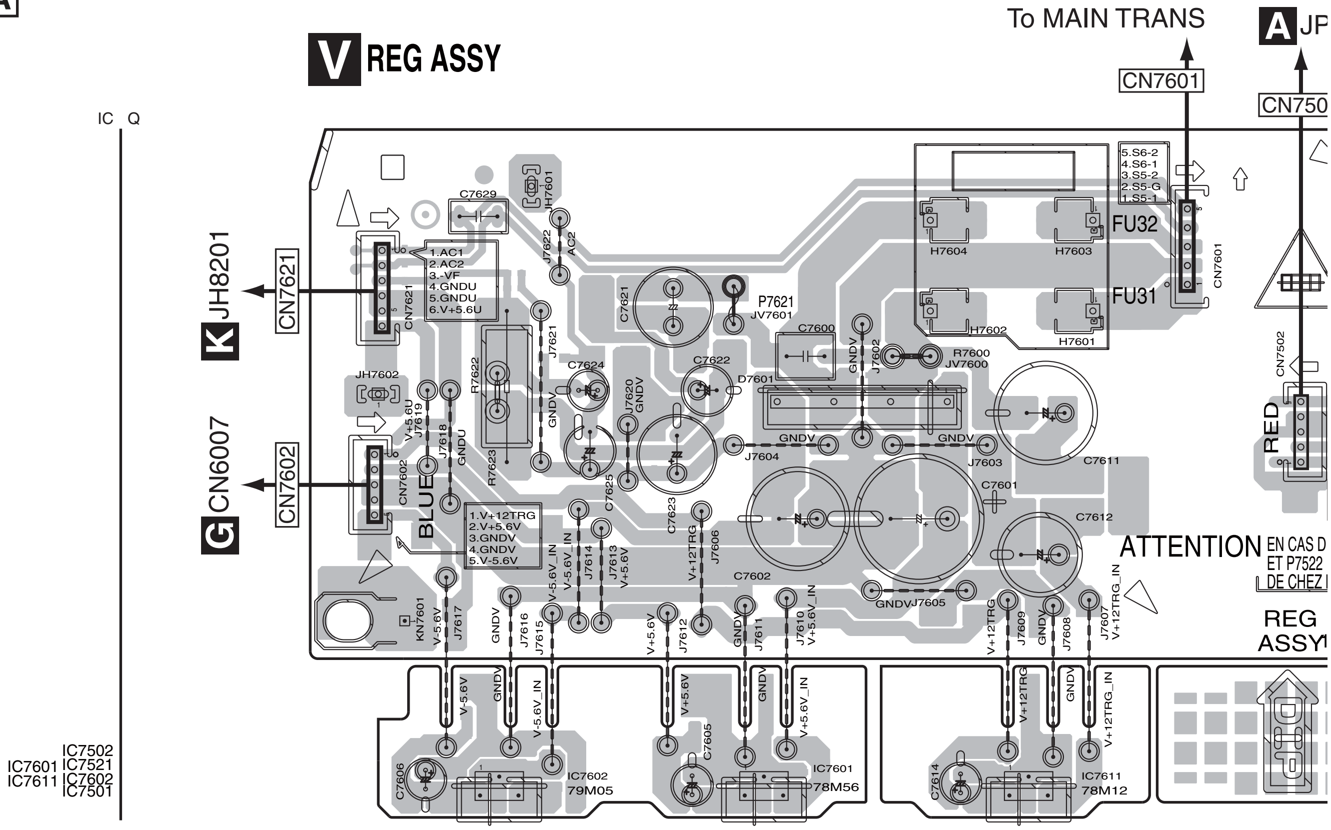

C4927
C4929
C4928
CN4901
CN4902
CN4903
C4202
C4302
C4402
C4502
C4602
R4313
R4413
R4513
R4613
R4066
R4065
D4906
D4904
C4925
D4903
C4924
R4012
R4009
R4010
R4011
D4003
D4001
D4002
D4004
R4095
R4097
R4091
R4005
C4001
R4001
R4006
R4002
C4002
Q4015
D4012
D4011
D4014
D4013
C4033
C4034
D4009
R4086
R4082
D4010
R4087
R4085
Q4004
Q4005
Q4006
Q4007
Q4008
Q4009
Q4011
Q4010
CN4000
R4046
C4014
R4047
C4015
R4048
C4016
R4049
C4017
R4050
R4051
R4052
R4053

(ANP7612-C)

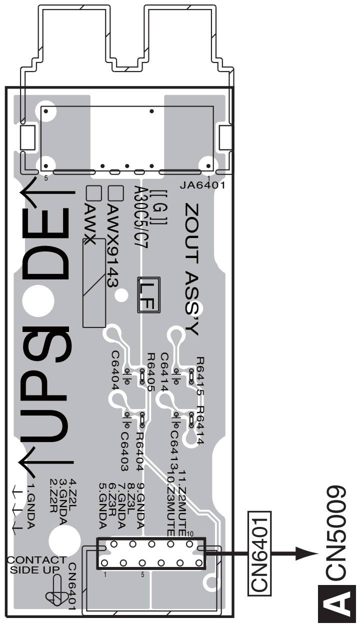
11.14 ZOUT, PRIMARY GUARD and REG ASSYS

SIDE A

V REG ASSY


To MAIN TRANS
CN7601
A JP
CN750
IC Q
K JH8201
CN7621
G CN6007
CN7602
1.AC1
2.AC2
3.-VF
4.GNDU
5.GNDU
6.V+5.6U
1.V+12TRG
2.V+5.6V
3.GNDV
4.GNDV
5.V-5.6V
5.S6-2
4.S6-1
3.S5-2
2.S5-G
1.S5-1
FU32
FU31
H7604
H7603
H7602
H7601
C7629
C7621
P7621
JV7601
C7600
R7600
JV7600
C7624
C7622
D7601
JH7602
R7622
R7623
C7625
C7623
C7611
C7601
C7612
C7602
J7603
J7604
J7605
BLUE
RED
CN7502
KN7601
ATTENTION
EN CAS D
ET P7522
DE CHEZ I
REG
ASSY
IC7602
79M05
IC7601
78M56
IC7611
78M12
C7606
C7605
C7614
IC7502
IC7601 IC7521
IC7611 IC7602
IC7501

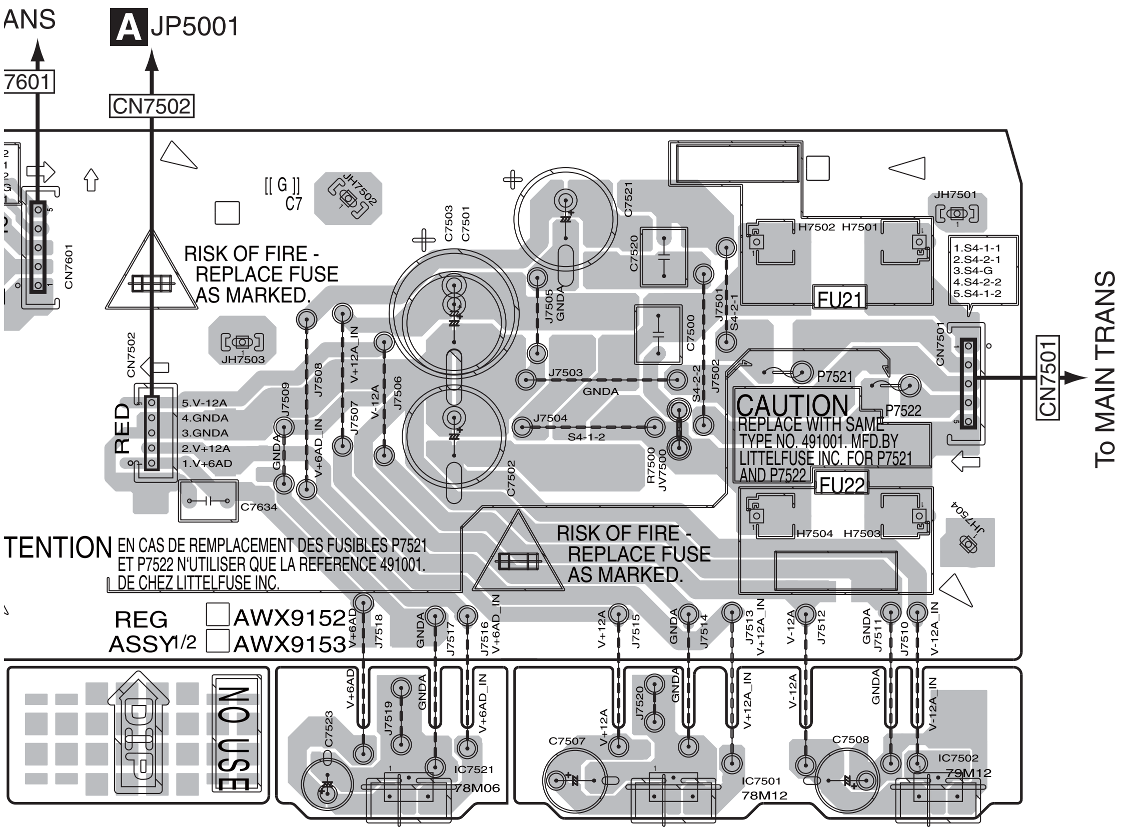
S ZOUT ASSY


JA6401
ZOUT ASS'Y
[[G]]
A30C5/C7
AWX9143
AWX
LF
UPSIDE
C6404
R6405
C6414
R6415
R6414
R6404
C6403
C6413
1.GNDA
2.Z2R
3.GNDA
4.Z2L
5.GNDA
6.Z3R
7.GNDA
8.Z3L
9.GNDA
10.Z3MUTE
11.Z2MUTE
CONTACT
SIDE UP
CN6401
A CN5009

(ANP7651-B)

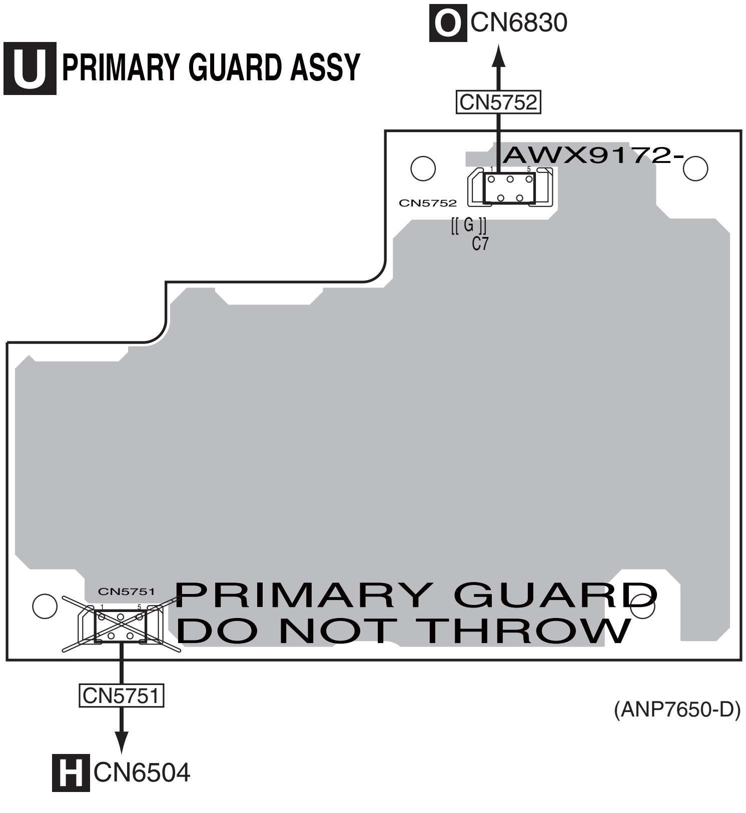
S U V

SIDE A


ANS
7601
A JP5001
CN7502
CN7601
JH7502
[[G]]
C7
RISK OF FIRE -
REPLACE FUSE
AS MARKED.
JH7503
RED
5.V-12A
4.GNDA
3.GNDA
2.V+12A
1.V+6AD
J7509
GNDA
J7508
V+6AD_IN
J7507
V+12A_IN
V-12A
J7506
C7634
C7503
C7501
C7502
C7521
C7520
J7505
GNDA
J7503
J7504
S4-1-2
C7500
J7501
S4-2-1
S4-2-2
J7502
R7500
JV7500
H7502
H7501
FU21
JH7501
1.S4-1-1
2.S4-2-1
3.S4-G
4.S4-2-2
5.S4-1-2
CN7501
P7521
P7522
CAUTION
REPLACE WITH SAME
TYPE NO. 491001. MFD.BY
LITTELFUSE INC. FOR P7521
AND P7522
FU22
H7504
H7503
JH7504
To MAIN TRANS
ATTENTION EN CAS DE REMPLACEMENT DES FUSIBLES P7521
ET P7522 N'UTILISER QUE LA REFERENCE 491001.
DE CHEZ LITTELFUSE INC.
RISK OF FIRE -
REPLACE FUSE
AS MARKED.
REG
ASSY 1/2
☐ AWX9152
☐ AWX9153
V+6AD
J7518
GNDA
J7517
J7516
V+6AD_IN
V+12A
J7515
GNDA
J7514
J7513
V+12A_IN
V-12A
J7512
GNDA
J7511
J7510
V-12A_IN
DIP
NO USE
C7523
J7519
IC7521
78M06
C7507
J7520
IC7501
78M12
C7508
IC7502
79M12

(ANP7654-B)

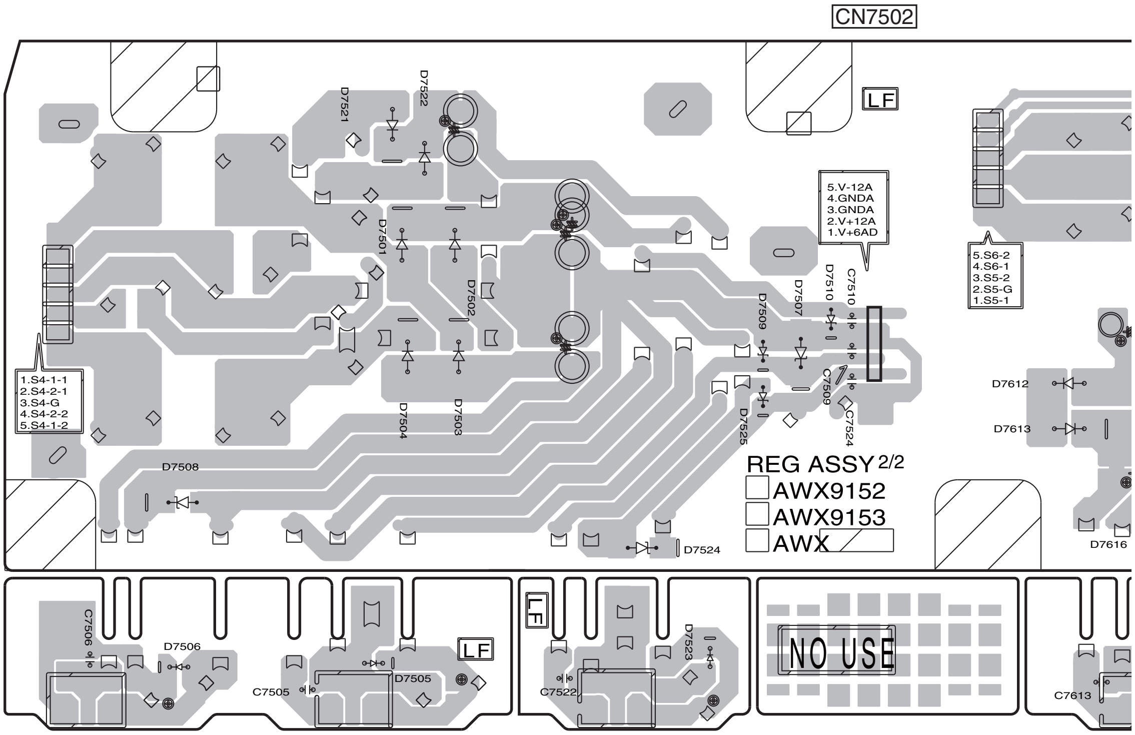
U PRIMARY GUARD ASSY


O CN6830
CN5752
AWX9172-
CN5752
[[G]]
C7
CN5751
PRIMARY GUARD
DO NOT THROW
CN5751
H CN6504

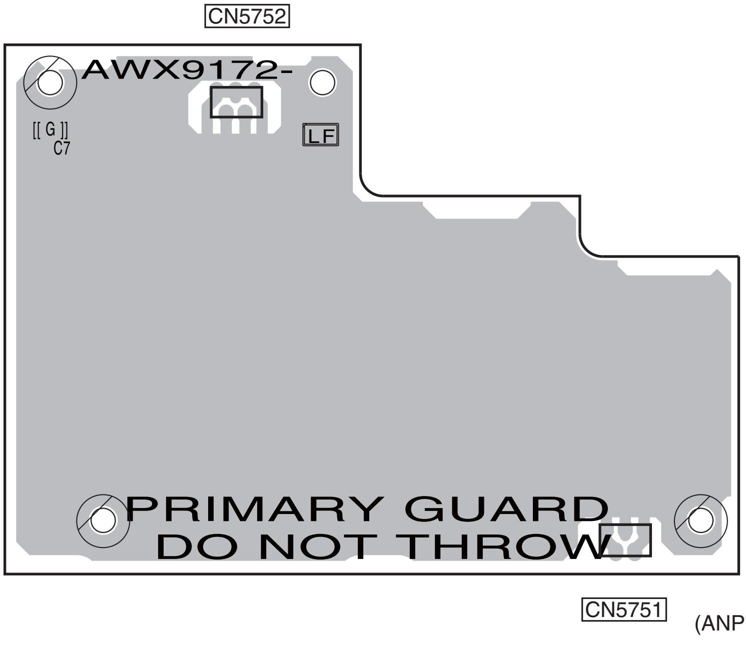
(ANP7650-D)

SIDE B

V REG ASSY

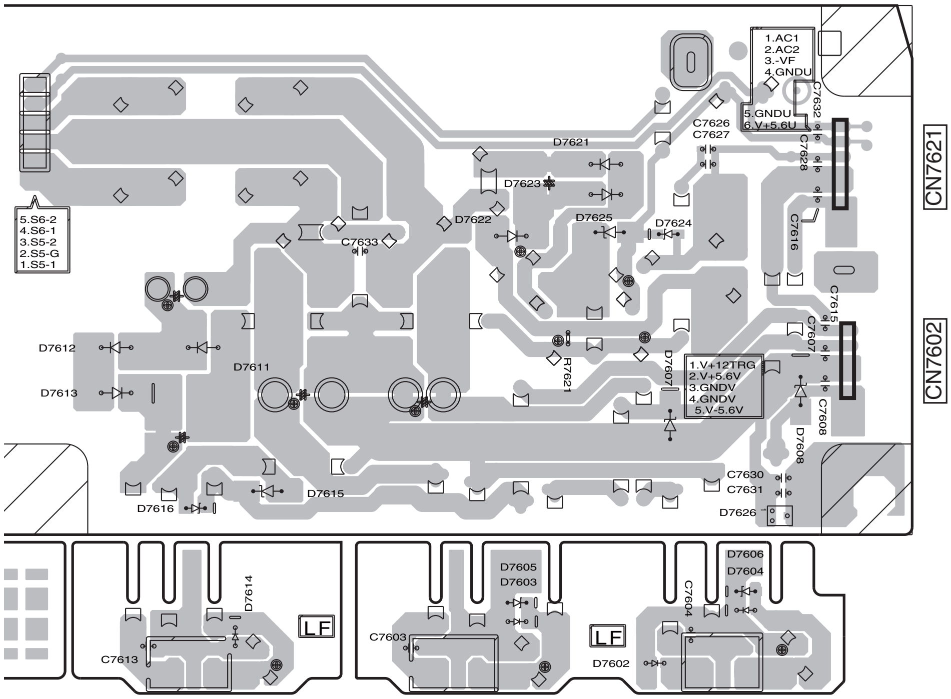

CN7502
LF
5.V-12A
4.GNDA
3.GNDA
2.V+12A
1.V+6AD
5.S6-2
4.S6-1
3.S5-2
2.S5-G
1.S5-1
1.S4-1-1
2.S4-2-1
3.S4-G
4.S4-2-2
5.S4-1-2
D7521
D7522
D7501
D7502
D7504
D7503
D7508
D7509
D7507
D7510
C7510
C7509
C7524
D7525
D7524
D7612
D7613
D7616
REG ASSY 2/2
☐ AWX9152
☐ AWX9153
☐ AWX
C7506
D7506
C7505
D7505
LF
LF
D7523
C7522
NO USE
C7613

U PRIMARY GUARD ASSY


CN5752
AWX9172-
[[G]]
C7
LF
PRIMARY GUARD
DO NOT THROW
CN5751

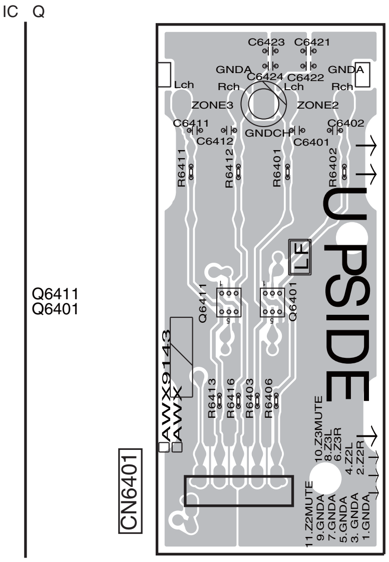
(ANP7650-D)

SIDE B


1.AC1
2.AC2
3.-VF
4.GNDU
5.GNDU
6.V+5.6U
C7632
C7626
C7627
C7628
CN7621
D7621
D7623
D7622
D7625
D7624
C7633
C7616
5.S6-2
4.S6-1
3.S5-2
2.S5-G
1.S5-1
C7615
C7607
CN7602
D7612
D7611
D7613
R7621
D7607
1.V+12TRG
2.V+5.6V
3.GNDV
4.GNDV
5.V-5.6V
C7608
D7608
C7630
C7631
D7626
D7616
D7615
D7614
LF
C7613
D7605
D7603
C7603
LF
D7602
D7606
D7604
C7604

(ANP7654-B)

S ZOUT ASSY


IC Q
Q6411
Q6401
C6423
C6421
GNDA
GNDA
C6424
C6422
Lch
Rch
Lch
Rch
ZONE3
ZONE2
C6411
C6402
C6412
GNDCH
C6401
R6411
R6412
R6401
R6402
UPSIDE
LF
Q6411
Q6401
AWX9143
AWX
R6413
R6416
R6403
R6406
10.Z3MUTE
8.Z3L
6.Z3R
4.Z2L
2.Z2R
11.Z2MUTE
9.GNDA
7.GNDA
5.GNDA
3.GNDA
1.GNDA
CN6401

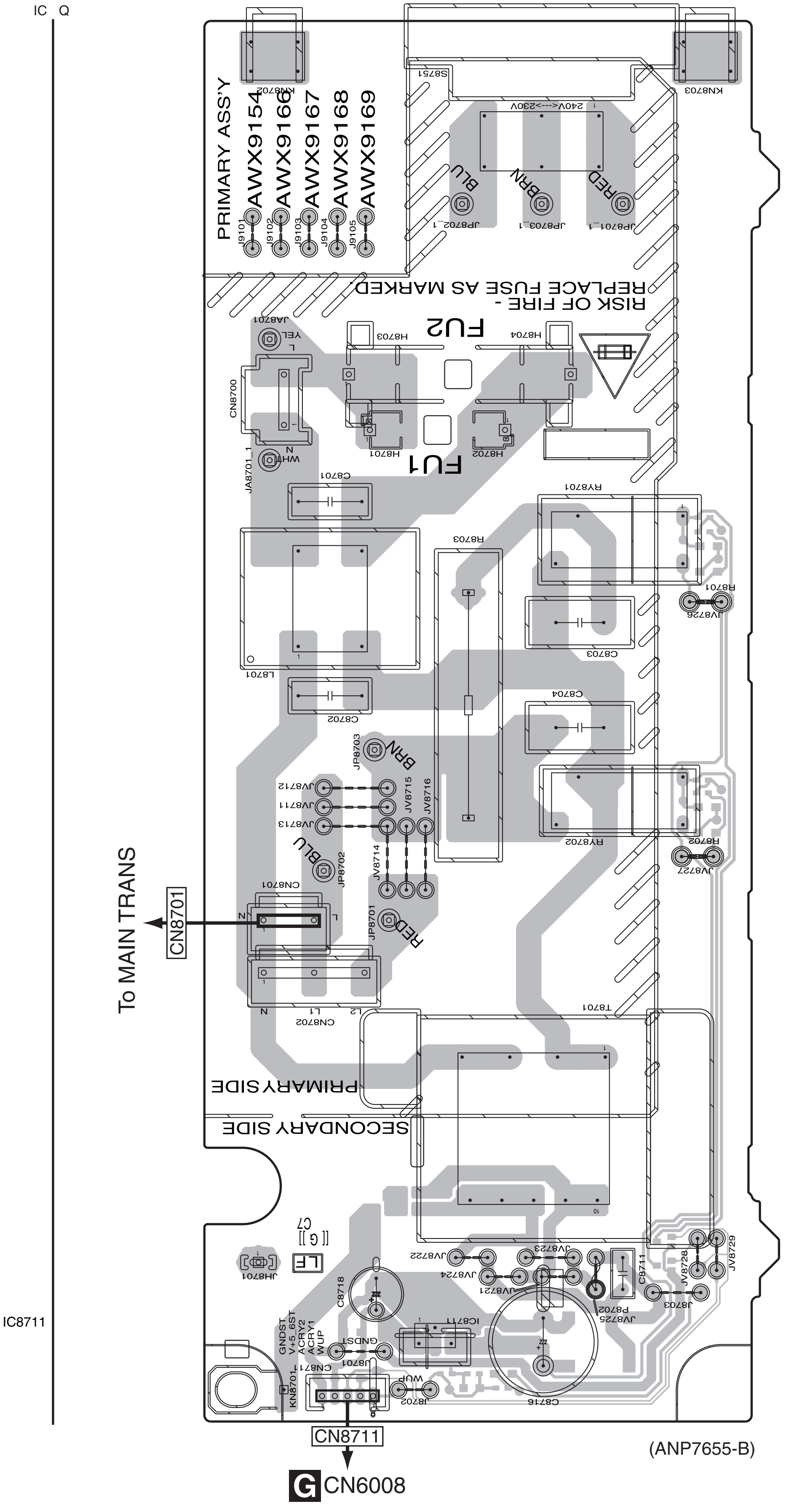
(ANP7651-B)

11.15 PRIMARY ASSY

SIDE A

SIDE A

T PRIMARY ASSY

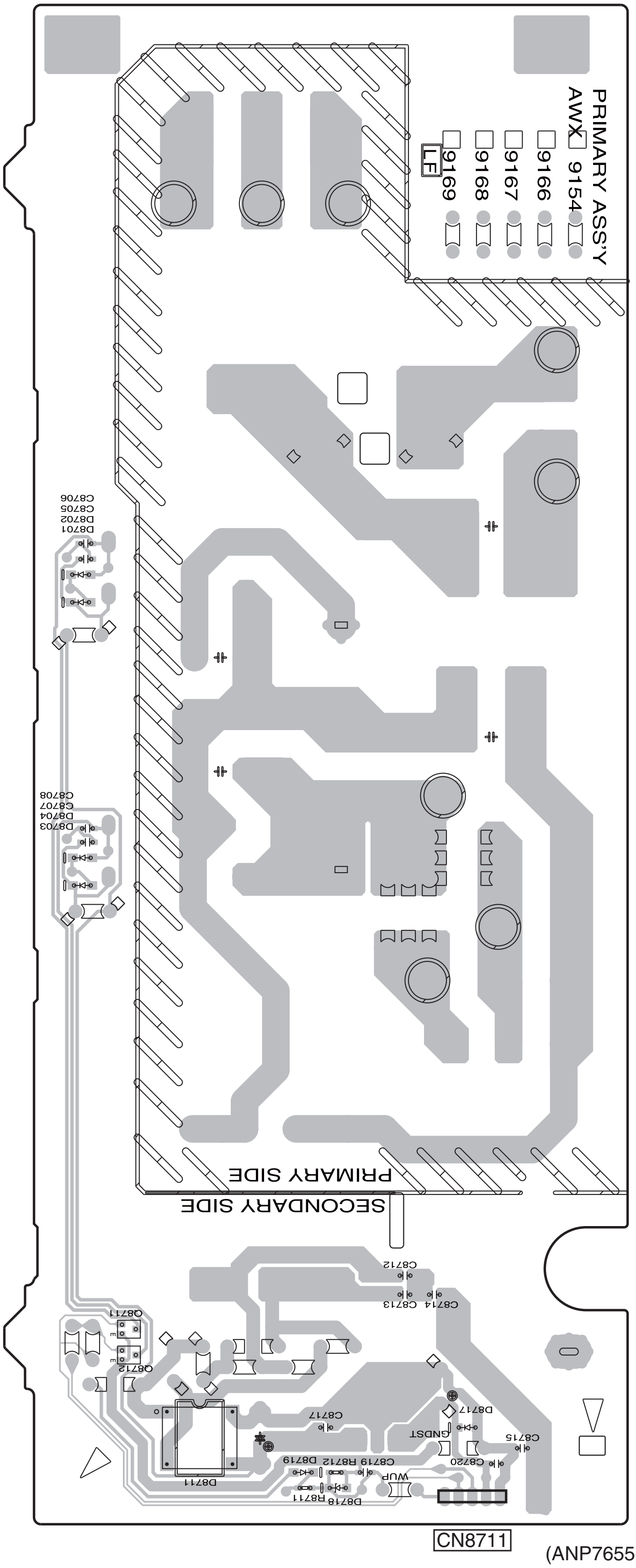

IC Q
PRIMARY ASS'Y
AWX9154
AWX9166
AWX9167
AWX9168
AWX9169
J9101
J9102
J9103
J9104
J9105
KN8702
KN8703
S8751
240V<--->230V
BLU
BRN
RED
JP8701_1
JP8702_1
JP8703_1
RISK OF FIRE -
REPLACE FUSE AS MARKED
FU1
FU2
H8701
H8702
H8703
H8704
JA8701
JA8701_1
YEL
WHT
CN8700
C8701
C8702
C8703
C8704
L8701
R8701
R8702
R8703
RY8701
RY8702
JV8711
JV8712
JV8713
JV8714
JV8715
JV8716
JV8726
JV8727
JP8701
JP8702
JP8703
CN8701
CN8702
To MAIN TRANS
T8701
PRIMARY SIDE
SECONDARY SIDE
C7
[[G]]
LF
JH8701
C8711
C8716
C8718
IC8711
JV8721
JV8722
JV8723
JV8724
JV8725
JV8728
JV8729
J8701
J8702
J8703
P8702
GNDST
V+5_6ST
ACRY2
ACRY1
WUP
KN8701
CN8711
G CN6008

(ANP7655-B)

SIDE B **SIDE B**

T PRIMARY ASSY

IC Q


PRIMARY ASS'Y
AWX☐ 9154
☐9166
☐9167
☐9168
☐9169 LF
C8706
C8705
D8702
D8701
C8708
C8707
D8704
D8703
PRIMARY SIDE
SECONDARY SIDE
C8712
C8713 C8714
Q8711
Q8712
D8711
C8717
D8717
GNDST
C8715
C8720
C8719 R8712 D8719
D8718 R8711
WUP
CN8711

Q8711

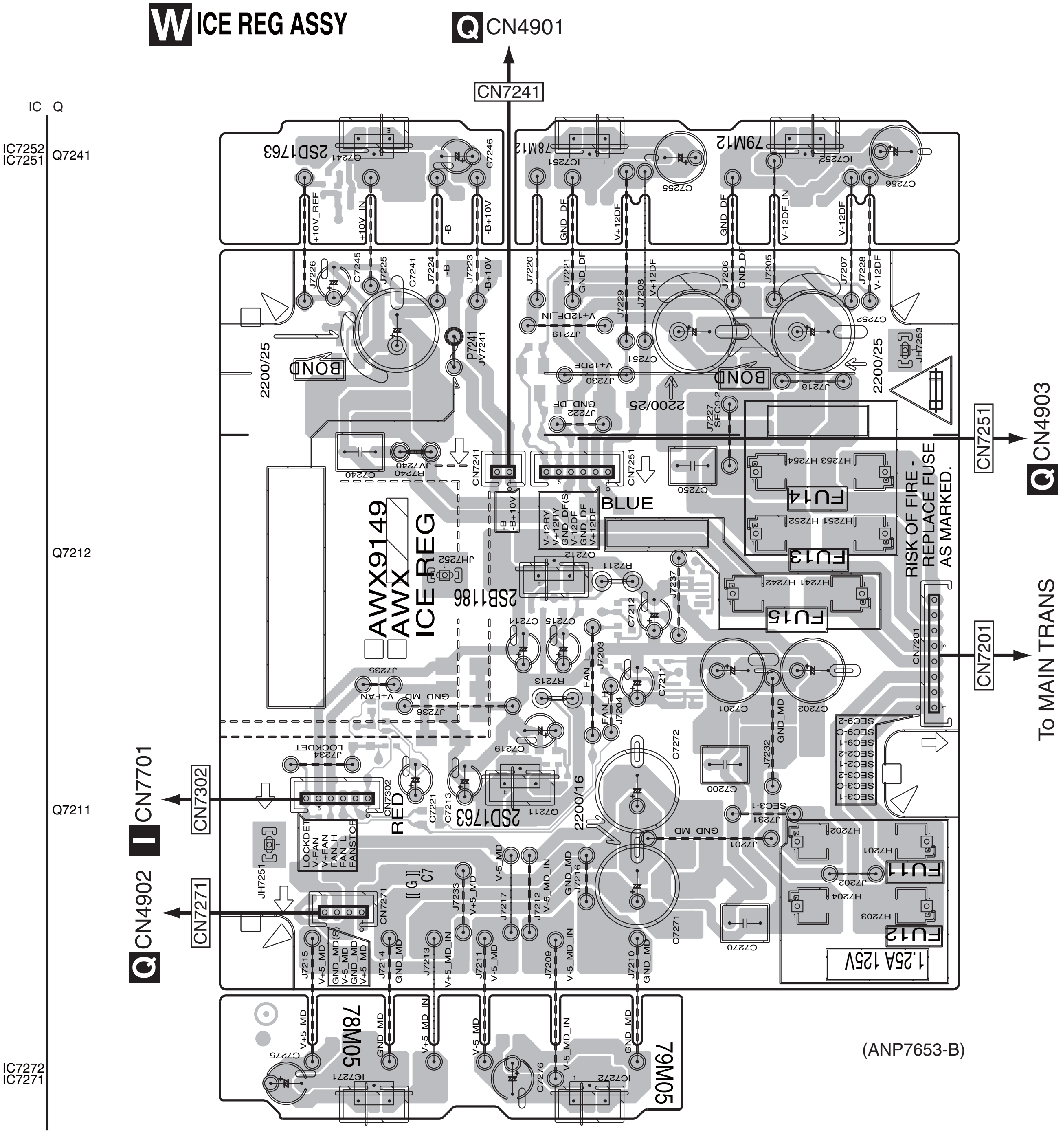
Q8712

(ANP7655-B)

11.16 ICE REG ASSY

SIDE A

SIDE A


W ICE REG ASSY
Q CN4901
CN7241
IC Q
IC7252
IC7251
Q7241
Q7212
Q7211
IC7272
IC7271
2SD1763
78M12
79M12
+10V_REF
+10V_IN
-B
-B+10V
GND_DF
V+12DF
V-12DF
V-12DF_IN
V+12DF_IN
2200/25
BOND
P7241
JV7241
CN7251
Q CN4903
RISK OF FIRE - REPLACE FUSE AS MARKED.
FU14
FU13
FU15
FU11
FU12
1.25A 125V
BLUE
AWX9149
AWX
ICE REG
2SB1186
CN7201
To MAIN TRANS
SEC9-2
SEC9-C
SEC9-1
SEC2-1
SEC2-2
SEC3-C
SEC3-2
SEC3-1
2200/16
I CN7701
CN7302
RED
LOCKDET
V-FAN
V+FAN
FAN_H
FAN_L
FANSTOP
Q CN4902
CN7271
GND_MD
V+5_MD
V-5_MD
V+5_MD_IN
V-5_MD_IN
78M05
79M05
(ANP7653-B)

SIDE B **SIDE B**

W ICE REG ASSY

IC Q

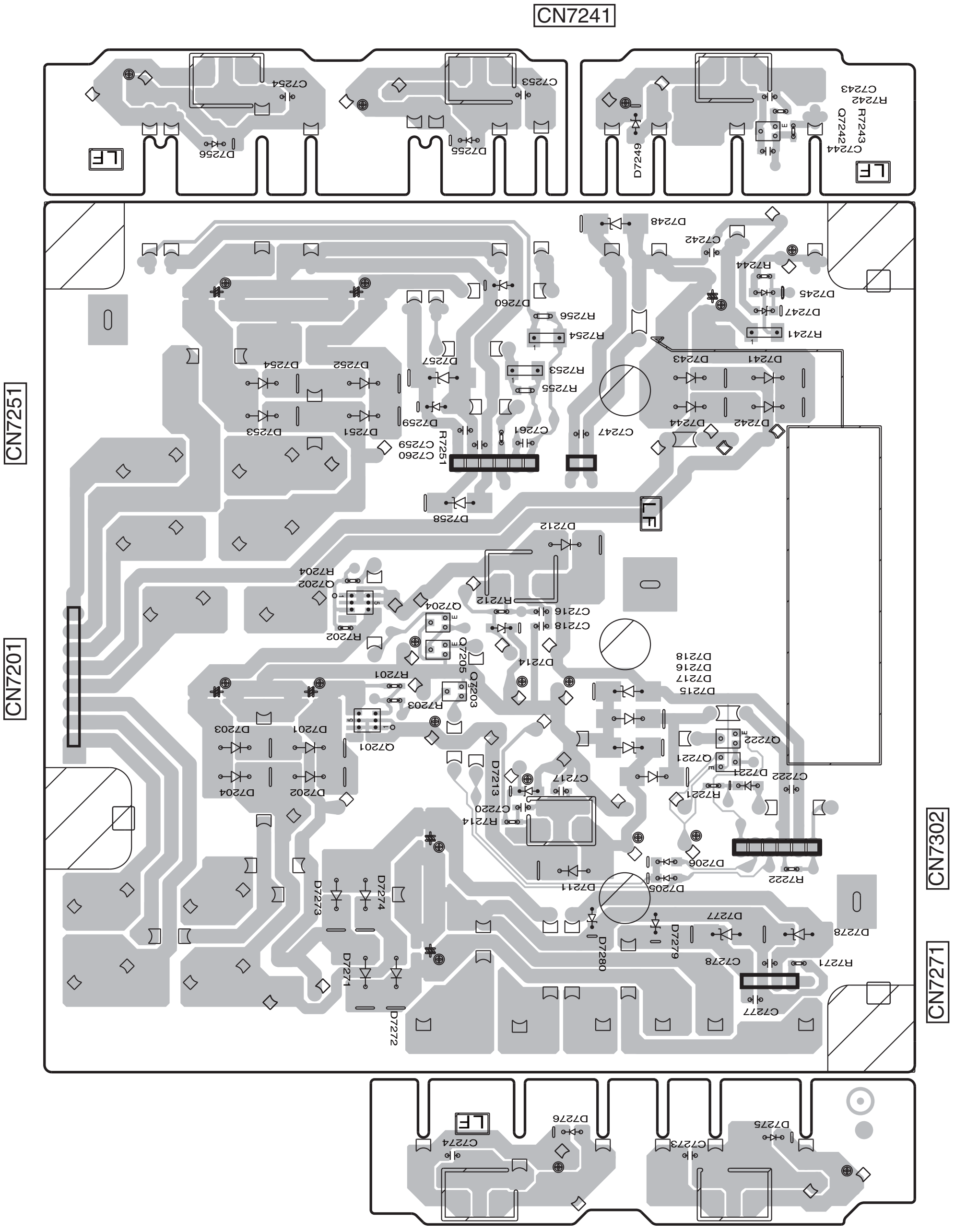
Q7242

Q7202
Q7204

Q7205

Q7203

Q7222
Q7201
Q7221

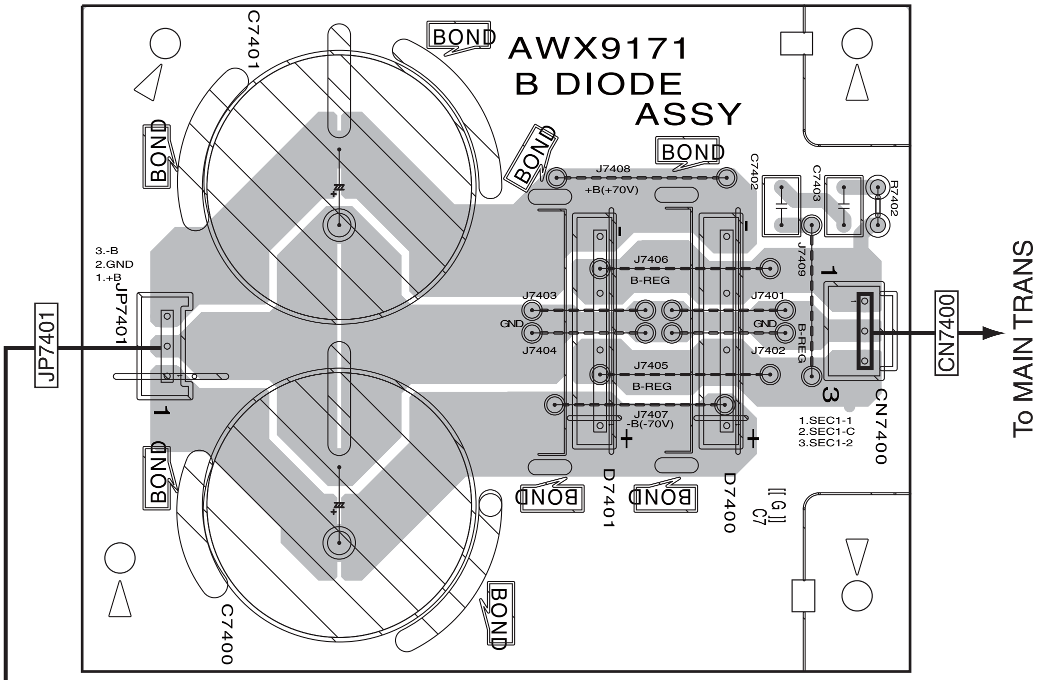

CN7241
CN7251
CN7201
CN7302
CN7271
LF

(ANP7653-B)

11.17 B DIODE and B REG ASSYS

SIDE A

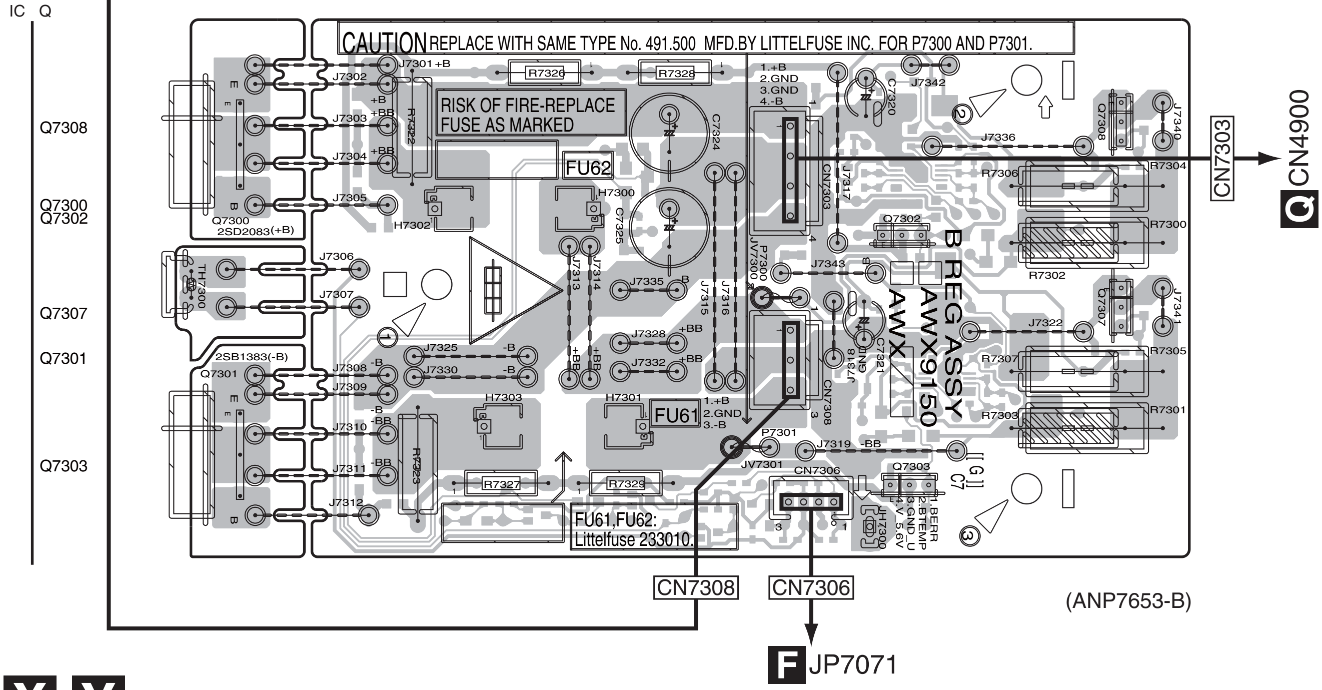
X B DIODE ASSY


AWX9171
B DIODE
ASSY
BOND
C7401
C7400
C7402
C7403
R7402
J7408
+B(+70V)
J7406
B-REG
J7403
GND
J7404
J7405
B-REG
J7407
-B(-70V)
J7401
GND
J7402
B-REG
J7409
D7401
D7400
JP7401
3.-B
2.GND
1.+B
CN7400
1.SEC1-1
2.SEC1-C
3.SEC1-2
To MAIN TRANS
[[G]]
C7

(ANP7653-B)

SIDE A

Y B REG ASSY

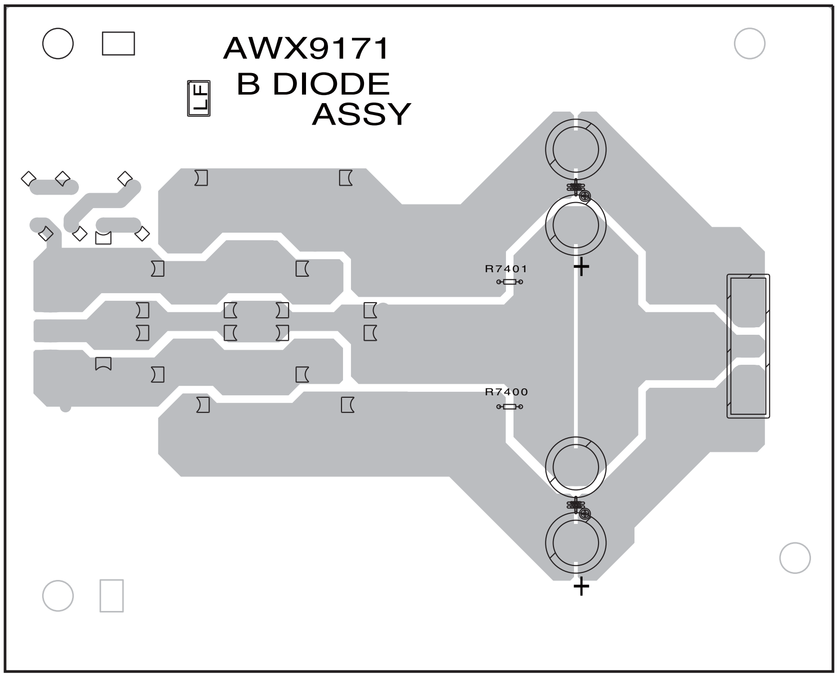

IC Q
Q7308
Q7300
Q7302
Q7307
Q7301
Q7303
CAUTION REPLACE WITH SAME TYPE No. 491.500 MFD.BY LITTELFUSE INC. FOR P7300 AND P7301.
RISK OF FIRE-REPLACE
FUSE AS MARKED
FU62
FU61
FU61,FU62:
Littelfuse 233010.
B REG ASSY
AWX9150
AWX
Q7300
2SD2083(+B)
2SB1383(-B)
TH7300
J7301 +B
J7302
J7303
J7304
J7305
J7306
J7307
J7308
J7309
J7310
J7311
J7312
J7313
J7314
J7315
J7316
J7317
J7318
J7319 -BB
J7322
J7325
J7328
J7330
J7332
J7335
J7336
J7340
J7341
J7342
J7343
R7300
R7301
R7302
R7303
R7304
R7305
R7306
R7307
R7322
R7323
R7326
R7327
R7328
R7329
C7320
C7321
C7324
C7325
H7300
H7301
H7302
H7303
P7300
P7301
JV7300
JV7301
CN7303
1.+B
2.GND
3.GND
4.-B
CN7308
1.+B
2.GND
3.-B
CN7306
1.BERR
2.BTEMP
3.GND
4.V_5.6V
JH7306
Q7303
[[G]]
C7
CN7303
Q CN4900
CN7308
CN7306
F JP7071

(ANP7653-B)

X Y

SIDE B

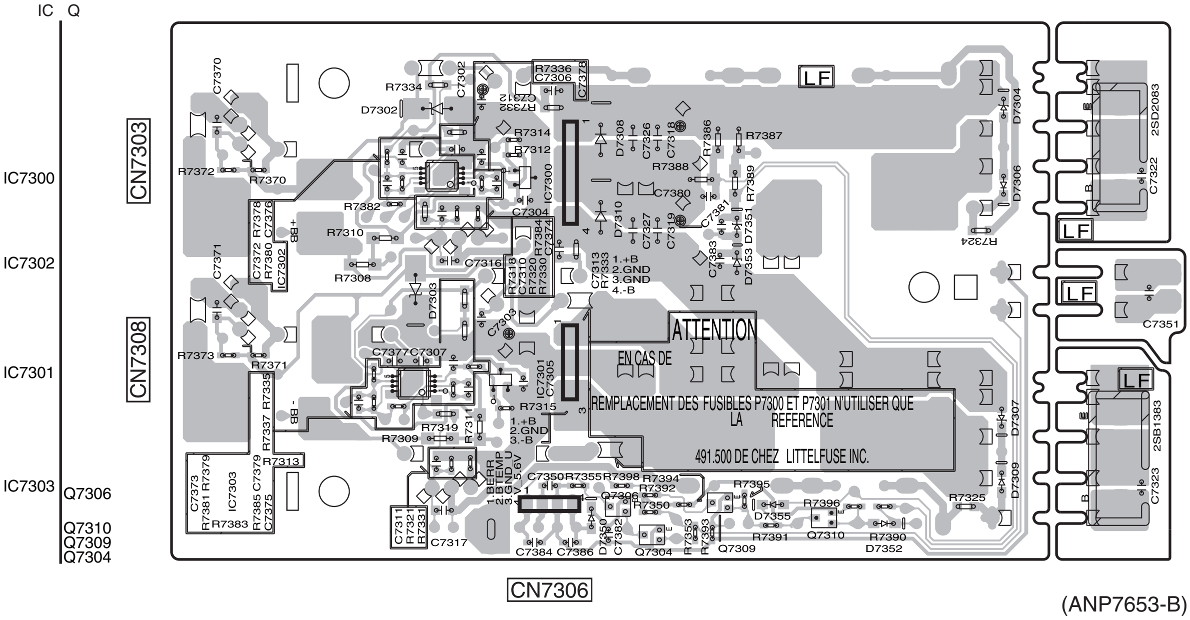
X B DIODE ASSY


AWX9171
B DIODE
ASSY
LF
R7401
R7400
+
+

(ANP7653-B)

SIDE B

Y B REG ASSY


IC Q
IC7300
IC7302
IC7301
IC7303
Q7306
Q7310
Q7309
Q7304
CN7303
CN7308
CN7306
LF
ATTENTION
EN CAS DE
REMPLACEMENT DES FUSIBLES P7300 ET P7301 N'UTILISER QUE
LA REFERENCE
491.500 DE CHEZ LITTELFUSE INC.
1.+B
2.GND
3.GND
4.-B
1.+B
2.GND
3.-B
1.BERR
2.BTEMP
3.GND
4.V_5.6V
+B
-B
C7370
C7371
R7334
C7302
D7302
R7332
C7312
R7336
C7306
C7378
R7314
R7312
IC7300
C7304
R7372
R7370
R7382
R7310
R7308
C7372
R7380
C7302
R7378
C7376
C7316
D7303
R7318
C7310
R7320
R7330
R7384
C7374
C7313
R7333
C7303
C7377
C7307
C7301
C7305
R7315
R7373
R7371
R7335
R7337
R7319
R7311
R7309
R7313
C7373
R7381
R7379
IC7303
R7385
C7379
C7375
R7383
C7311
R7321
R7331
C7317
C7350
R7355
R7398
R7394
R7392
Q7306
R7350
C7384
C7386
D7350
C7382
Q7304
R7353
R7393
Q7309
R7395
D7355
R7391
R7396
Q7310
R7390
D7352
R7325
D7308
C7326
C7318
R7386
R7387
R7388
C7380
D7310
C7327
C7319
C7381
D7351
R7389
C7383
D7353
D7304
D7306
R7324
2SD2083
C7322
C7351
D7307
D7309
2SB1383
C7323
E
B
1
4
3

(ANP7653-B)

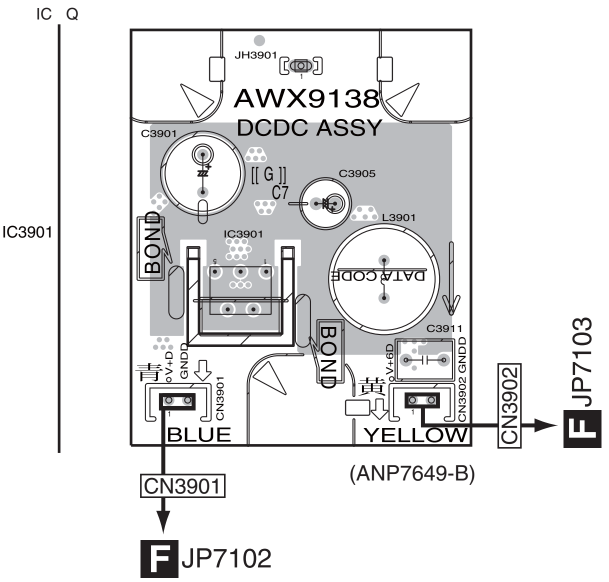
11.18 DCDC and HDMI RECT ASSYS

SIDE A

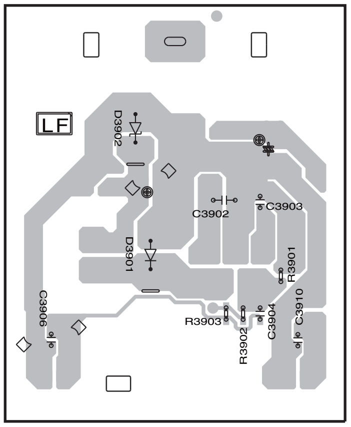
SIDE B

Z DCDC ASSY

Z DCDC ASSY


IC Q
IC3901
JH3901
AWX9138
DCDC ASSY
C3901
[[G]]
C7
C3905
L3901
IC3901
BOND
DATA CODE
C3911
BOND
青
V+D
GNDD
CN3901
BLUE
黄
V+6D
GNDD
CN3902
YELLOW
CN3902
F JP7103
CN3901
F JP7102

(ANP7649-B)


LF
D3902
C3902
C3903
D3901
R3901
C3906
R3903
R3902
C3904
C3910

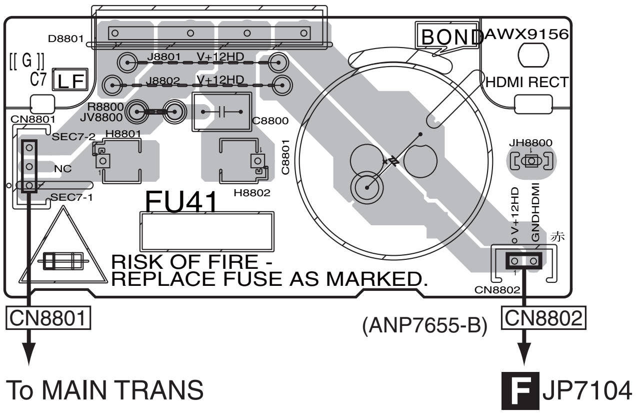
(ANP7649-B)

SIDE A

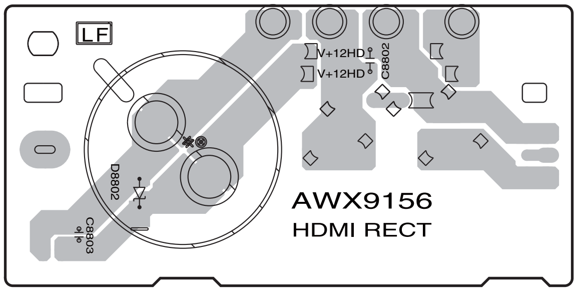
SIDE B

AA HDMI RECT ASSY

AA HDMI RECT ASSY


D8801
BOND
AWX9156
HDMI RECT
[[G]]
C7
LF
J8801
V+12HD
J8802
V+12HD
R8800
JV8800
C8800
CN8801
SEC7-2
H8801
NC
SEC7-1
C8801
H8802
JH8800
FU41
V+12HD
GNDHDMI
赤
RISK OF FIRE -
REPLACE FUSE AS MARKED.
CN8802
CN8801
CN8802
To MAIN TRANS
F JP7104

(ANP7655-B)


LF
V+12HD
V+12HD
C8802
D8802
C8803
AWX9156
HDMI RECT

(ANP7655-B)

12. ELECTRICAL PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47 k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω → 56×10^1 → 561 .... RD1/4PU$\boxed{5}\boxed{6}\boxed{1}$J
47 kΩ → 47×10^3 → 473 .... RD1/4PU$\boxed{4}\boxed{7}\boxed{3}$J
0.5 Ω → R50 .... RN2H$\boxed{R}\boxed{5}\boxed{0}$K
1 Ω → 1R0 .... RS1P$\boxed{1}\boxed{R}\boxed{0}$K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 kΩ → 562×10^1 → 5621 .... RN1/4PC$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$F

LIST OF ASSEMBLIES

Mark	No. Description	Part No.
	1..ICEPOWER AMP ASSY	AWH7017
NSP	1..COMPOSITE ICE ASSY	AWM8106
	2..COMPOSITE S ASSY	AWX9144
	2..ICE BUFFER ASSY	AWX9145
	2..PRE BRIDGE ASSY	AWX9146
	2..ICE SHIELD ASSY	AWX9173
NSP	1..PRIM DISPLAY ASSY	AWM8120
	2..PRIMARY ASSY	AWX9166
	2..HDMI RECT ASSY	AWX9156
	2..DISPLAY ASSY (SC-LX81)	AWX9158
	2..DISPLAY ASSY (SC-LX71)	AWX9238
	2..VOL ASSY	AWX9159
	2..POWER SW ASSY	AWX9160
	2..V-BRIDGE ASSY	AWX9161
NSP	1..DIGITAL MOTHER ASSY	AWP7058
	2..D-MOTHER ASSY (SC-LX81)	AWX9196
	2..D-MOTHER ASSY (SC-LX71)	AWX9202
	2..ICE INTERFACE ASSY	AWX9137
	2..DCDC ASSY	AWX9138
	2..H GUARD2 ASSY	AWX9147

Mark	No. Description	Part No.
	2..H GUARD ASSY	AWX9174
NSP	1..COMPONENT FIN ASSY	AWQ7058
	2..COMPONENT ASSY (SC-LX81)	AWX9141
	2..COMPONENT ASSY (SC-LX71)	AWX9211
	2..FRONT IN ASSY	AWX9142
	2..ZOUT ASSY	AWX9143
NSP	1..INTERFACE REG ASSY	AWR7067
	2..INTERFACE ASSY	AWX9148
	2..ICE REG ASSY	AWX9149
	2..B REG ASSY	AWX9150
	2..B DIODE ASSY	AWX9171
NSP	1..FBRIDGE REG ASSY	AWR7068
	2..REG ASSY	AWX9152
	2..FRONT BRIDGE ASSY	AWX9155
NSP	1..AUDIO ASSY	AWR7071
	2..AUDIO ASSY	AWX9206
	2..232C CONTROL ASSY	AWX9209
	2..PRIMARY GUARD ASSY	AWX9172
	1..HDMI NETWORK ASSY (SC-LX81)	AWX9234
	1..HDMI NETWORK ASSY (SC-LX71)	AWX9235
	1..FM/AM TUNER UNIT	AXX7248

CONTRAST OF PCB ASSEMBLIES

G COMPONENT ASSY

AWX9141 and AWX9211 are constructed the same except for the following:

Mark	Symbol and Description	AWX9141	AWX9211
	IC6002, IC6004 Multiplexer(4chx2)	TC74LVX4052FT	Not used
	IC6008 Video IC	NJM2581M	Not used
	JA6003 Pin Jack(6p)	AKB7204	Not used
	JA6005 Pin Jack(3p)	Not used	AKB7203
	R6043-R6045	RS1/16S750J	Not used
	R6108	RS1/16S103J	Not used
	C6050, C6051, C6055-C6057	CEAT101M10	Not used
	C6058, C6059, C6148, C6151, C6158, C6161	CKSRYB105K10	Not used
	C6060, C6061, C6149, C6150, C6159, C6160	CCSRCH102J50	Not used
	C6131-C6136	CKSRYB103K50	Not used

K DISPLAY ASSY

AWX9158 and AWX9238 are constructed the same except for the following:

Mark	Symbol and Description	AWX9158	AWX9238
	R8015, R8084	Not used	RS1/16S0R0J

A AUDIO ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 5001,5282,5302,5401		NJM4565MD
	IC 5201		BD3473KS2
	IC 5221		BD3814FV
	IC 5255,5351		TC4053BFN
	IC 5301		TC4066BFN
	IC 5651		LC72725KM
	Q 5269,5301,5351		RT1N241M
	Q 5302		RT1P241M
	Q 5401,5402		2SK208
	Q 5431		IMX25
	Q 5451		RT3T22M
	Q 5453		RT1N140M
⚠	Q 5501		2SD1858X
⚠	Q 5502		2SB1237X
⚠	Q 5601		2SD1664
	D 5201,5301,5302		1SS302
	D 5401,5402,5451,5452		1SS352
	D 5501,5502		UDZS7R5(B)
	D 5602		UDZS10(B)
	D 5651		1SS352

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 5651	CHIP SOLID INDUCTOR	QTL1013
	JA 5001,5002	PIN JACK(4P)	XKB3017
	JA 5004-5009	PIN JACK(4P)	XKB3017
	RY 5451	RELAY	VSR1017
	X 5651	CRYSTAL RESONATOR (4.332 MHz)	ASS7004
	CN 5002	CONNECTOR	CKS3384
	CN 5003	CONNECTOR	CKS3386
	CN 5004	13P CONNECTOR	52044-1345
	CN 5005	17P CONNECTOR	52044-1745
	CN 5006	21P SOCKET	XKP3081
	CN 5007	9P CONNECTOR	52044-0945
	CN 5008	11P CONNECTOR	52044-1145
	CN 5009	CONNECTOR	CKS3376
	JH 5001	PCB BINDER	VEF1040
	JP 5001	5P HOUSING ASSY	ADX7653

RESISTORS

Mark	No.	Description	Part No.
	R 5413,5414		RD1/4MUF330J
	Other Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
	C 5001,5002,5403,5404		CCSRCH221J50
	C 5003,5004,5017,5018		CEAT100M50
	C 5005,5006,5201,5203		CCSRCH331J50
	C 5007,5008,5019,5020		CEAT470M16
	C 5009,5010,5653		CCSRCH561J50
	C 5011,5012		CKSRYB822K50
	C 5013-5016		CKSRYB122K50
	C 5021,5022,5232,5234		CKSRYB104K16
	C 5031-5034,5041,5042		CCSRCH101J50
	C 5035,5038,5055,5056		CEAT220M50
	C 5043,5044,5113,5114		CCSRCH220J50
	C 5045,5046,5115,5116		CEAT100M50
	C 5051-5054,5071-5074		CCSRCH101J50
	C 5075,5076,5085,5086		CEAT220M50
	C 5081-5084,5091-5094		CCSRCH101J50
	C 5095,5096,5105,5106		CEAT220M50
	C 5101-5104,5111,5112		CCSRCH101J50
	C 5121-5124,5131,5132		CCSRCH101J50
	C 5125,5126,5145,5146		CEAT220M50
	C 5133,5134		CCSRCH220J50
	C 5135,5136,5221,5222		CEAT100M50
	C 5141-5144,5151-5154		CCSRCH101J50
	C 5155,5156,5165,5166		CEAT220M50
	C 5161-5164,5171-5174		CCSRCH101J50
	C 5175,5176,5185,5186		CEAT220M50
	C 5181-5184,5205,5206		CCSRCH101J50
	C 5202,5204		ACH1479
	C 5207,5208		CEAT220M50
	C 5209,5210		CFHXSQ103J16
	C 5223,5224,5227,5228		CEAT2R2M50
	C 5225,5226,5271-5278		CEAT100M50
	C 5231,5233,5411,5412		CEAT470M16
	C 5235,5236,5282,5303		CCSRCH101J50
	C 5265,5266,5285,5286		CKSRYB103K50
	C 5290,5503,5504,5656		CEAT100M50
	C 5301,5302,5305,5306		CKSRYB103K50
	C 5304		CCSRCH101J50
	C 5307,5308		ACH7196
	C 5351,5352,5421,5423		CKSRYB103K50
	C 5356,5357,5508,5510		CCSRCH102J50
	C 5401,5402		CEAT1R0M50
	C 5409,5410		CEAT471M16
	C 5419,5420		CKSRYB105K16
	C 5422,5424		CEAT470M25
	C 5431,5432,5601,5605		CKSRYB103K50
	C 5451,5603,5606		CEAT101M16
	C 5501,5502		CEAT2R2M50
	C 5511,5611,5652		CCSRCH102J50
	C 5602,5708,5710,5712		CKSRYB104K16
	C 5607,5621,5622		CCSRCH100D50
	C 5613		CCSRCH331J50
	C 5651		CEAT101M10
	C 5654,5705		CKSRYB103K50
	C 5655,5657		CCSRCH270J50
	C 5658		CKSRYB472K50
	C 5701,5703,5709,5711		CKSRYB471K50
	C 5702,5704		CKSRYB104K50
	C 5713,5715,5719		CKSRYB471K50
	C 5714,5718		CKSRYB104K16

B D-MOTHER ASSY (SC-LX81)

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 2001		PEG489B8
	IC 2002,2003,2203,2204		TC4094BFN
	IC 2005		BU4842F
	IC 2006		TC74LCX244FTS1
	IC 2007,2008,2406		TC74VHCT125AFTS1
	IC 2009		TC74VHCT541AFTS1
⚠	IC 2011,2412		NJM2880U1-33
	IC 2201		PEG396A
	IC 2202		AYW7256
	IC 2205,2211,2408,2409		TC74VHC125FTS1
	IC 2206		TC74VHC32FTS1
	IC 2207,2407,2709,2805		TC74VHC08FTS1
	IC 2208		TC74VHCT08AFTS1
	IC 2209		TC74VHC04FTS1
	IC 2210		TC74VHC00FTS1
	IC 2213		TC7SH04FUS1
	IC 2401		AK4114VQ
	IC 2403,2404,2803		TC74LCX157FTS1
	IC 2410,2411,2707		TC7SH08FUS1
⚠	IC 2413,2983		NJM2845DL1-05
	IC 2414		TC74VHC125FTS1
	IC 2701		DSPA56720AG
	IC 2702		AYW7234
	IC 2703		HY57V641620FTP-6
	IC 2704,2705		TC74LCX573FTS1
⚠	IC 2706		NJM2872BF33
⚠	IC 2710		NJM2846DL3-33
⚠	IC 2711		PQ1LAX95MSPQ
⚠	IC 2712		RP131H101D
⚠	IC 2713		NJM2846DL3-25
	IC 2714		TC7SH32FUS1
	IC 2801		DSPC56371AF180
	IC 2802		PDC168A8
	IC 2804,2806		TC74LCX08FTS1
	IC 2807		TC74VHC126FTS1
	IC 2808		TC7WH157FU
	IC 2901,2902,3401		NJM4565MD
	IC 2951		PCM1804DB
⚠	IC 2981		NJM2391DL1-33
⚠	IC 2982		NJM2885DL1-33
	IC 3001,3101,3201,3301		RNB4580F
	IC 3051,3151,3251,3351		SRC4190IDB
	IC 3052,3152,3252,3352		WM8740SEDS
	IC 3053,3153,3253,3353		TC7WH125FU
	IC 3451		AK4387ET
	Q 2005,2008		RT1N241M
	Q 2006		RT3P22M
	Q 2007		2SA1366
	Q 2201		RT1N141M-11
	Q 2202		2SA1602A
	Q 2203		RT1P431M
	Q 2205,2207,2208		RT1P241M
	D 2001,2003,2951,2952		MC2848-11
	D 2002		RB520S-30
⚠	D 2004,2005		MC2848-11
	D 2201		1SS357
	D 2701-2704		1SR154-400
	D 2953,2954		MC2846-11

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 2001	CHIP SOLID INDUCTOR	QTL1013
	L 2002,2003	CHIP SOLID INDUCTOR	ATL7002
	L 2404-2406	CHIP SOLID INDUCTOR	QTL1013
	L 2408,2409	CHIP SOLID INDUCTOR	QTL1013
	L 2411-2416	CHIP SOLID INDUCTOR	QTL1013
	L 2701	CHIP SOLID INDUCTOR	QTL1013
	L 2703-2711	CHIP SOLID INDUCTOR	QTL1013
	L 2713	CHIP SOLID INDUCTOR	QTL1013
	L 2801-2804	CHIP SOLID INDUCTOR	QTL1013
	L 2806-2811	CHIP SOLID INDUCTOR	QTL1013
	L 2951,2952	CHIP SOLID INDUCTOR	QTL1013
	L 3051-3054	CHIP SOLID INDUCTOR	QTL1013
	L 3081	CHIP SOLID INDUCTOR	QTL1013
	L 3151-3154	CHIP SOLID INDUCTOR	QTL1013
	L 3181	CHIP SOLID INDUCTOR	QTL1013
	L 3251-3254	CHIP SOLID INDUCTOR	QTL1013
	L 3281	CHIP SOLID INDUCTOR	QTL1013
	L 3351-3354	CHIP SOLID INDUCTOR	QTL1013
	L 3381,3451	CHIP SOLID INDUCTOR	QTL1013
	JA 2401	PIN JACK(3P)	AKB7205
	JA 2402-2405	OPT. LINK IN	AKS7001
	JA 2406,2407	OPT. LINK OUT	AKS7002
	KN 2001,2201	WRAPPING TERMINAL	VNF1084
	KN 2401	SCREW PLATE	VNE1948
	X 2001	RESONATOR (24.000 MHz)	CSS1716
	X 2201	CERAMIC RESONATOR (15.7MHz)	ASS7087
	X 2701	CRYSTAL OSCILLATOR (24.576 MHz)	ASS7072
	X 2702	CRYSTAL OSCILLATOR (22.5792 MHz)	ASS7071
	CN 2001	16P CONNECTOR	VKN1420
	CN 2002	29P CONNECTOR	VKN1844
	CN 2003	22P CONNECTOR	RKN1063
	CN 2005,2007,2902	PLUG	CKS1764
	CN 2006	7P SOCKET	XKP3074
	CN 2008,2903	PLUG	CKS1761
	CN 2401	PLUG(3P)	KM200NA3
	CN 2402	23P SOCKET	XKP3082
	CN 2403	CONNECTOR	CKS3815
	CN 2901	PLUG	CKS1758
	JH 2001	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
	R 2001-2003,2005-2007		RS1/16S104J
	R 2010-2012,2035,2202		RS1/16S473J
	R 2015,2027,2032,2039		RS1/16S104J
	R 2018,2209		RS1/16S512J
	R 2021,2026,2028,2030		RAB4CQ101J
	R 2033,2034		RAB4CQ471J
	R 2036,2049,2207,2214		RAB4CQ101J
	R 2041,2043,2045,2046		RS1/16S104J
	R 2047,3117,3118,3217		RS1/16S474J
	R 2050,2066,2067,2069		RS1/16S104J
	R 2072,2103,2105,2107		RAB4CQ473J
	R 2073		RS1/16S472J
	R 2140,2141,2270,2271		RS1/16S0R0J
	R 2203,2717-2719,2721		RAB4CQ220J
	R 2210,2237,2466,2467		RS1/16S101J
	R 2211,2217,2229,2230		RS1/16S473J
	R 2216,2218,2223,2226		RAB4CQ101J

Mark	No. Description	Part No.
R	2233,2235,2246	RS1/16S473J
R	2234,2425,2730,2812	RAB4CQ101J
R	2241	RAB4CQ473J
R	2255	RS1/16S104J
R	2401-2403	RS1/16S750J
R	2404-2406,2901-2904	RS1/16S220J
R	2423	RS1/16SS1802F
R	2604,3017,3018,3051	RS1/16S0R0J
R	2714,2905,2906,2909	RS1/16S103J
R	2715,2746,2802	RAB4CQ470J
R	2722,2761,2762,2765	RAB4CQ220J
R	2747,2803	RAB4CQ103J
R	2759,2760,2763,2764	RAB4CQ221J
R	2766	RAB4CQ220J
R	2789	RS1/16SS1000F
R	2790	RS1/16SS1202F
R	2791	RS1/10S0R0J
R	2795,2796	RS1/16S101J
R	2822,3455	RAB4CQ101J
R	2907,2908,2911,2912	RS1/16S682J
R	2910	RS1/16S103J
R	2913-2918,3108,3116	RS1/16S392J
R	2919,2920	RS1/16S822J
R	2921,2922	RS1/16S911J
R	3001,3002,3009,3010	RS1/16S181J
R	3003-3006,3011-3014	RS1/16S222J
R	3007,3008,3015,3016	RS1/16S202J
R	3021,3022,3119,3120	RS1/16S221J
R	3101,3109,3201,3202	RS1/16S681J
R	3102,3110	RS1/16S181J
R	3103-3106,3203-3206	RS1/16S222J
R	3107,3112,3114,3115	RS1/16S122J
R	3111,3113,3211-3214	RS1/16S272J
R	3151,3251,3351,3456	RS1/16S0R0J
R	3207,3208,3215,3216	RS1/16S122J
R	3209,3210,3301,3302	RS1/16S681J
R	3218,3317,3318,3413	RS1/16S474J
R	3219,3220,3319,3320	RS1/16S221J
R	3303-3306	RS1/16S222J
R	3307,3308,3315,3316	RS1/16S122J
R	3309,3310	RS1/16S681J
R	3311-3314	RS1/16S272J
R	3401,3402	RS1/16S223J
R	3403,3404	RS1/16S302J
R	3405,3406,3409,3410	RS1/16S332J
R	3407,3408	RS1/16S392J
R	3411,3412	RS1/16S221J
R	3414	RS1/16S474J
R	3458	RS1/16S4R7J
	Other Resistors	RS1/16SS###J

CAPACITORS

Mark	No. Description	Part No.
C	2001,2040,3060,3068	CKSRYB105K16
C	2002,2004,2006,2011	CKSRYB104K16
C	2003,2014,2015,2039	CKSRYB471K50
C	2005,2007,2030,2032	CKSRYB102K50
C	2008,2738,2817	CKSSYB103K16
C	2009	ACH7298
C	2012	CKSRYB472K50
C	2013,2220,2221,2954	CKSRYB103K50
C	2016,2047,3001,3002	CCSRCH102J50
C	2017,2018,2020-2022	CKSRYB104K16
C	2019,2026,2211-2215	CKSSYB104K10
C	2024,2029,2031,2038	CKSRYB104K16
C	2025	CEAT331M10
C	2027,2454,2457,2762	CKSQYB225K10
C	2028	CKSRYB473K50
C	2037,2929,2952,2984	CEHAZL101M25
C	2041,2046,2209,2210	CKSRYB104K16
C	2050-2054,2056-2065	CCSSCH100D50
C	2201,2426,2827	ACH7272
C	2202,2204,2205,2208	CCSSCH471J16
C	2206,2965,3052,3071	CCSRCH471J50
C	2216	CEAT102M10
C	2217,2227,2402,2404	CKSRYB104K16
C	2222,2224-2226,2228	CKSSYB104K10
C	2230,2414,2421,2425	CKSSYB104K10
C	2406-2413,2417,2450	CKSRYB104K16
C	2415,2431,2433,2437	CKSSYB471K50
C	2416,2419,2422,2458	CEHAZL101M10
C	2418,2420,2424,2747	CCSSCH471J16
C	2423	CKSRYB474K10
C	2430,2432,2436,2438	CKSSYB104K10
C	2439,2447,2449,2462	CKSSYB471K50
C	2440,2448,2452,2461	CKSSYB104K10
C	2451,2785	ACH7273
C	2453,2456,2780,2901	CKSRYB104K16
C	2455,2732,2781,2783	CEHAZL221M10
C	2463,2701,2703,2704	CKSSYB471K50
C	2464,2702,2705,2708	CKSSYB104K10
C	2706,2707,2709,2711	CKSSYB471K50
C	2710,2712,2714,2718	CKSSYB104K10
C	2713,2715-2717,2719	CKSSYB471K50
C	2720,2723,2725,2728	CKSSYB104K10
C	2721,2722,2724,2726	CKSSYB471K50
C	2727,2729,2736,2743	CKSSYB471K50
C	2730,2734	CKSQYB474K25
C	2731	CKSQYB225K16
C	2733	ACH7203
C	2735,2779,2851,2852	CKSQYB475K10
C	2737,2744,2746,2756	CKSSYB104K10
C	2745,2769,2772,2801	CKSSYB471K50
C	2748,2750,2751,2753	CKSSYB105K6R3
C	2749,2752,2754	CCSSCH102J50
C	2755,2791,2796	CKSSYB105K6R3
C	2757,2759,2764,2766	CCSSCH471J16
C	2758,2760,2761,2763	CKSSYB104K10
C	2765,2770,2771	CKSSYB104K10
C	2773-2776,2786-2790	CKSSYB104K10
C	2777,2778,2991,2993	CKSQYB225K10
C	2782,2956,2957,3061	ACH7211
C	2784,3065,3165,3265	CEHAZL221M10
C	2792-2795	CCSSCH102J50
C	2797,2798,2800,2802	CKSSYB104K10
C	2799	VCH1234
C	2803,2805,2807,2809	CKSSYB471K50
C	2804,2806,2808,2810	CKSSYB104K10
C	2811,2813,2815,2818	CKSSYB471K50
C	2812,2814,2816,2819	CKSSYB104K10

Mark	No.	Description	Part No.
C	2820,2822,2824,2831		CKSSYB471K50
C	2821,2823,2825,2829		CKSSYB104K10
C	2826,3055,3063,3155		ACH7268
C	2830,2832,2834,2836		CKSSYB104K10
C	2833,2835,2837,2838		CKSSYB471K50
C	2839,2840,3081,3181		CKSSYB104K10
C	2841,3082,3182,3282		CKSSYB471K50
C	2902,2928,2953,2955		CKSRYB104K16
C	2903,2904		DCH1201
C	2905-2908,3109,3110		ACH7196
C	2911,2912,2915,2916		CFHXSQ103J16
C	2913,2914		CCSRCH101J50
C	2958,2961-2963,2966		CKSRYB104K16
C	2959,2964,3059,3070		CKSRYB103K50
C	2960,2981,2990,2995		CEHAZL101M10
C	2983,2992,2994,3053		CKSRYB104K16
C	2987		CEHAZL101M25
C	2996,2997,3007,3008		CFHXSQ103J16
C	3003-3006,3103,3105		CCSRCH331J50
C	3013,3014,3113,3114		CFHXSQ472J16
C	3051,3151,3251,3351		CEHAZL101M10
C	3056,3058,3062,3064		CKSRYB104K16
C	3057,3075,3101,3102		CCSRCH102J50
C	3066,3072,3153,3156		CKSRYB104K16
C	3067,3161,3167,3261		ACH7211
C	3104,3106		CCSRCH271J50
C	3107,3108,3207,3208		CFHXSQ103J16
C	3152,3171,3252,3271		CCSRCH471J50
C	3157,3175,3201,3202		CCSRCH102J50
C	3158,3162,3164,3166		CKSRYB104K16
C	3159,3170,3259,3270		CKSRYB103K50
C	3160,3168,3260,3268		CKSRYB105K16
C	3163,3255,3263,3355		ACH7268
C	3172,3253,3256,3258		CKSRYB104K16
C	3203-3206,3303-3306		CCSRCH331J50
C	3209,3210,3309,3310		ACH7196
C	3213,3214,3313,3314		CFHXSQ472J16
C	3257,3275,3301,3302		CCSRCH102J50
C	3262,3264,3266,3272		CKSRYB104K16
C	3267,3361,3367		ACH7211
C	3281,3381,3461		CKSSYB104K10
C	3307,3308		CFHXSQ103J16
C	3352,3371,3405,3406		CCSRCH471J50
C	3353,3356,3358,3362		CKSRYB104K16
C	3357,3375		CCSRCH102J50
C	3359,3370,3456,3458		CKSRYB103K50
C	3360,3368		CKSRYB105K16
C	3363		ACH7268
C	3364,3366,3372,3452		CKSRYB104K16
C	3365		CEHAZL221M10
C	3382		CKSSYB471K50
C	3401,3402		CEAT220M50
C	3403,3404		CCSRCH391J50
C	3407,3408		CKSRYB104K25
C	3409,3410		CEAT100M50
C	3453,3454		CEAT470M16
C	3455,3457,3460		CKSRYB104K16
C	3459		CCSRCH471J50

B D-MOTHER ASSY (SC-LX71)

SEMICONDUCTORS

Mark	No.	Description	Part No.
IC	2001		PEG489B8
IC	2002,2003,2203,2204		TC4094BFN
IC	2005		BU4842F
IC	2006		TC74LCX244FTS1
IC	2007,2008,2406		TC74VHCT125AFTS1
IC	2009		TC74VHCT541AFTS1
⚠ IC	2011,2412		NJM2880U1-33
IC	2201		PEG396A
IC	2202		AYW7256
IC	2205,2211,2408,2409		TC74VHC125FTS1
IC	2206		TC74VHC32FTS1
IC	2207,2407,2709,2805		TC74VHC08FTS1
IC	2208		TC74VHCT08AFTS1
IC	2209		TC74VHC04FTS1
IC	2210		TC74VHC00FTS1
IC	2213		TC7SH04FUS1
IC	2401		AK4114VQ
IC	2403,2404,2803		TC74LCX157FTS1
IC	2410,2411,2707		TC7SH08FUS1
⚠ IC	2413,2983		NJM2845DL1-05
IC	2414		TC74VHC125FTS1
IC	2701		DSPA56720AG
IC	2702		AYW7234
IC	2703		HY57V641620FTP-6
IC	2704,2705		TC74LCX573FTS1
⚠ IC	2706		NJM2872BF33
⚠ IC	2710		NJM2846DL3-33
⚠ IC	2711		PQ1LAX95MSPQ
⚠ IC	2712		RP131H101D
⚠ IC	2713		NJM2846DL3-25
IC	2714		TC7SH32FUS1
IC	2801		DSPC56371AF180
IC	2802		PDC168A8
IC	2804,2806		TC74LCX08FTS1
IC	2807		TC74VHC126FTS1
IC	2901,2902,3401		NJM4565MD
IC	2951		PCM1804DB
⚠ IC	2981		NJM2391DL1-33
IC	3001,3101,3201,3301		RNB4580F
IC	3052,3152,3252,3352		WM8740SEDS
IC	3451		AK4387ET
Q	2005,2008		RT1N241M
Q	2006		RT3P22M
Q	2007		2SA1366
Q	2201		RT1N141M-11
Q	2202		2SA1602A
Q	2203		RT1P431M
Q	2205,2207,2208		RT1P241M
D	2001,2003,2951,2952		MC2848-11
D	2002		RB520S-30
⚠ D	2004,2005		MC2848-11
D	2201		1SS357
D	2701-2704		1SR154-400
D	2953,2954		MC2846-11

MISCELLANEOUS

Mark	No.	Description	Part No.
L	2001	CHIP SOLID INDUCTOR	QTL1013
L	2002,2003	CHIP SOLID INDUCTOR	ATL7002

Mark	No.	Description	Part No.
L	2404-2406	CHIP SOLID INDUCTOR	QTL1013
L	2408,2409	CHIP SOLID INDUCTOR	QTL1013
L	2411-2416	CHIP SOLID INDUCTOR	QTL1013
L	2701	CHIP SOLID INDUCTOR	QTL1013
L	2703-2711	CHIP SOLID INDUCTOR	QTL1013
L	2713	CHIP SOLID INDUCTOR	QTL1013
L	2801-2804	CHIP SOLID INDUCTOR	QTL1013
L	2806-2810	CHIP SOLID INDUCTOR	QTL1013
L	2951,2952	CHIP SOLID INDUCTOR	QTL1013
L	3053,3054	CHIP SOLID INDUCTOR	QTL1013
L	3153,3154	CHIP SOLID INDUCTOR	QTL1013
L	3253,3254	CHIP SOLID INDUCTOR	QTL1013
L	3353,3354	CHIP SOLID INDUCTOR	QTL1013
L	3451	CHIP SOLID INDUCTOR	QTL1013
JA	2402-2405	OPT. LINK IN	AKS7001
JA	2406,2407	OPT. LINK OUT	AKS7002
JA	2408	PIN JACK(2P)	AKB7173
KN	2001,2201	WRAPPING TERMINAL	VNF1084
KN	2401	SCREW PLATE	VNE1948
X	2001	RESONATOR (24.000 MHz)	CSS1716
X	2201	CERAMIC RESONATOR (15.7MHz)	ASS7087
X	2701	CRYSTAL OSCILLATOR (24.576 MHz)	ASS7072
X	2702	CRYSTAL OSCILLATOR (22.5792 MHz)	ASS7071
CN	2001	16P CONNECTOR	VKN1420
CN	2002	29P CONNECTOR	VKN1844
CN	2003	22P CONNECTOR	RKN1063
CN	2005,2007,2902	PLUG	CKS1764
CN	2006	7P SOCKET	XKP3074
CN	2008,2903	PLUG	CKS1761
CN	2401	PLUG(3P)	KM200NA3
CN	2402	23P SOCKET	XKP3082
CN	2403	CONNECTOR	CKS3815
CN	2901	PLUG	CKS1758
JH	2001	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
R	2001-2003,2005-2007		RS1/16S104J
R	2010,2013,2035,2201		RS1/16S473J
R	2015,2027,2032,2039		RS1/16S104J
R	2018,2209		RS1/16S512J
R	2021,2026,2028,2030		RAB4CQ101J
R	2033,2034		RAB4CQ471J
R	2036,2049,2207,2214		RAB4CQ101J
R	2041,2043,2045,2046		RS1/16S104J
R	2047,3117,3118,3217		RS1/16S474J
R	2050,2066,2067,2069		RS1/16S104J
R	2072,2103,2105,2107		RAB4CQ473J
R	2073		RS1/16S472J
R	2140,2141,2270,2271		RS1/16S0R0J
R	2203,2717-2719,2721		RAB4CQ220J
R	2210,2237,2466,2467		RS1/16S101J
R	2211,2217,2229,2230		RS1/16S473J
R	2216,2218,2223,2226		RAB4CQ101J
R	2233,2235		RS1/16S473J
R	2234,2425,2730,2812		RAB4CQ101J
R	2241		RAB4CQ473J
R	2255		RS1/16S104J
R	2401,2402		RS1/16S750J
R	2404,2405,2901-2904		RS1/16S220J
R	2423		RS1/16SS1802F

Mark	No.	Description	Part No.
R	2604,3017,3018,3065		RS1/16S0R0J
R	2714,2905,2906,2909		RS1/16S103J
R	2715,2746,2802		RAB4CQ470J
R	2722,2761,2762,2765		RAB4CQ220J
R	2747,2803		RAB4CQ103J
R	2759,2760,2763,2764		RAB4CQ221J
R	2766		RAB4CQ220J
R	2789		RS1/16SS1000F
R	2790		RS1/16SS1202F
R	2791		RS1/10S0R0J
R	2795,2796		RS1/16S101J
R	2822,3455		RAB4CQ101J
R	2907,2908,2911,2912		RS1/16S682J
R	2910		RS1/16S103J
R	2913-2918,3108,3116		RS1/16S392J
R	2919,2920		RS1/16S822J
R	2921,2922		RS1/16S911J
R	3001,3002,3009,3010		RS1/16S181J
R	3003-3006,3011-3014		RS1/16S222J
R	3007,3008,3015,3016		RS1/16S202J
R	3021,3022,3119,3120		RS1/16S221J
R	3066,3080,3165,3166		RS1/16S0R0J
R	3101,3109,3201,3202		RS1/16S681J
R	3102,3110		RS1/16S181J
R	3103-3106,3203-3206		RS1/16S222J
R	3107,3112,3114,3115		RS1/16S122J
R	3111,3113,3211-3214		RS1/16S272J
R	3180,3265,3266,3280		RS1/16S0R0J
R	3207,3208,3215,3216		RS1/16S122J
R	3209,3210,3301,3302		RS1/16S681J
R	3218,3317,3318,3413		RS1/16S474J
R	3219,3220,3319,3320		RS1/16S221J
R	3303-3306		RS1/16S222J
R	3307,3308,3315,3316		RS1/16S122J
R	3309,3310		RS1/16S681J
R	3311-3314		RS1/16S272J
R	3365,3366,3380,3456		RS1/16S0R0J
R	3401,3402		RS1/16S223J
R	3403,3404		RS1/16S302J
R	3405,3406,3409,3410		RS1/16S332J
R	3407,3408		RS1/16S392J
R	3411,3412		RS1/16S221J
R	3414		RS1/16S474J
R	3458		RS1/16S4R7J
	Other Resistors		RS1/16SS###J

CAPACITORS

Mark	No.	Description	Part No.
C	2001,2040,3060,3068		CKSRYB105K16
C	2002,2004,2006,2011		CKSRYB104K16
C	2003,2014,2015,2039		CKSRYB471K50
C	2005,2007,2030,2032		CKSRYB102K50
C	2008,2738,2817		CKSSYB103K16
C	2009		ACH7298
C	2012,3011,3012,3111		CKSRYB472K50
C	2013,2220,2221,2954		CKSRYB103K50
C	2016,2047,3001,3002		CCSRCH102J50
C	2017,2018,2020-2022		CKSRYB104K16
C	2019,2026,2211-2215		CKSSYB104K10
C	2024,2029,2031,2038		CKSRYB104K16
C	2025		CEAT331M10

Mark	No.	Description	Part No.
C	2027,2454,2457,2762		CKSQYB225K10
C	2028		CKSRYB473K50
C	2037,2929,2952,2984		CEHAZL101M25
C	2041,2046,2209,2210		CKSRYB104K16
C	2050-2054,2056-2065		CCSSCH100D50
C	2201,2426,2827		ACH7272
C	2202,2204,2205,2208		CCSSCH471J16
C	2206,2965,3071,3171		CCSRCH471J50
C	2216		CEAT102M10
C	2217,2227,2402,2404		CKSRYB104K16
C	2222,2224-2226,2228		CKSSYB104K10
C	2230,2414,2421,2425		CKSSYB104K10
C	2407-2413,2417,2450		CKSRYB104K16
C	2415,2431,2433,2437		CKSSYB471K50
C	2416,2419,2422,2458		CEHAZL101M10
C	2418,2420,2424,2747		CCSSCH471J16
C	2423		CKSRYB474K10
C	2430,2432,2434,2436		CKSSYB104K10
C	2438,2440,2448,2452		CKSSYB104K10
C	2439,2447,2449,2462		CKSSYB471K50
C	2451,2785		ACH7273
C	2453,2456,2780,2901		CKSRYB104K16
C	2455,2732,2781,2783		CEHAZL221M10
C	2461,2464,2702,2705		CKSSYB104K10
C	2463,2701,2703,2704		CKSSYB471K50
C	2706,2707,2709,2711		CKSSYB471K50
C	2708,2710,2712,2714		CKSSYB104K10
C	2713,2715-2717,2719		CKSSYB471K50
C	2718,2720,2723,2725		CKSSYB104K10
C	2721,2722,2724,2726		CKSSYB471K50
C	2727,2729,2736,2743		CKSSYB471K50
C	2728,2737,2744,2746		CKSSYB104K10
C	2730,2734		CKSQYB474K25
C	2731		CKSQYB225K16
C	2733		ACH7203
C	2735,2779,2851,2852		CKSQYB475K10
C	2745,2769,2772,2801		CKSSYB471K50
C	2748,2750,2751,2753		CKSSYB105K6R3
C	2749,2752,2754		CCSSCH102J50
C	2755,2791,2796		CKSSYB105K6R3
C	2756,2758,2760,2761		CKSSYB104K10
C	2757,2759,2764,2766		CCSSCH471J16
C	2763,2765,2770,2771		CKSSYB104K10
C	2773-2776,2786-2790		CKSSYB104K10
C	2777,2778,2993		CKSQYB225K10
C	2782,2956,2957,3061		ACH7211
C	2784,3065,3165,3265		CEHAZL221M10
C	2792-2795		CCSSCH102J50
C	2797,2798,2800,2802		CKSSYB104K10
C	2799		VCH1234
C	2803,2805,2807,2809		CKSSYB471K50
C	2804,2806,2808,2810		CKSSYB104K10
C	2811,2813,2815,2818		CKSSYB471K50
C	2812,2814,2816,2819		CKSSYB104K10
C	2820,2822,2824,2831		CKSSYB471K50
C	2821,2823,2825,2829		CKSSYB104K10
C	2826,3063,3163,3263		ACH7268
C	2830,2832,2834,2836		CKSSYB104K10
C	2833,2835,2837,2838		CKSSYB471K50

Mark	No.	Description	Part No.
C	2839,3461		CKSSYB104K10
C	2902,2928,2953,2955		CKSRYB104K16
C	2903,2904		DCH1201
C	2905-2908,3109,3110		ACH7196
C	2911,2912,2915,2916		CKSQYB103K50
C	2913,2914		CCSRCH101J50
C	2958,2961-2963,2966		CKSRYB104K16
C	2959,2964,3059,3070		CKSRYB103K50
C	2960,2981,2995		CEHAZL101M10
C	2983,2994,3058,3062		CKSRYB104K16
C	2985,2986,3407,3408		CKSRYB104K25
C	2987		CEHAZL101M25
C	3003-3006,3103,3105		CCSRCH331J50
C	3007,3008,3107,3108		CKSQYB103K50
C	3064,3066,3072,3158		CKSRYB104K16
C	3067,3161,3167,3261		ACH7211
C	3101,3102,3201,3202		CCSRCH102J50
C	3104,3106		CCSRCH271J50
C	3112,3211,3212,3311		CKSRYB472K50
C	3159,3170,3259,3270		CKSRYB103K50
C	3160,3168,3260,3268		CKSRYB105K16
C	3162,3164,3166,3172		CKSRYB104K16
C	3203-3206,3303-3306		CCSRCH331J50
C	3207,3208,3307,3308		CKSQYB103K50
C	3209,3210,3309,3310		ACH7196
C	3258,3262,3264,3266		CKSRYB104K16
C	3267,3361,3367		ACH7211
C	3271,3371,3405,3406		CCSRCH471J50
C	3272,3358,3362,3364		CKSRYB104K16
C	3301,3302		CCSRCH102J50
C	3312		CKSRYB472K50
C	3359,3370,3456,3458		CKSRYB103K50
C	3360,3368		CKSRYB105K16
C	3363		ACH7268
C	3365		CEHAZL221M10
C	3366,3372,3452,3455		CKSRYB104K16
C	3401,3402		CEAT220M50
C	3403,3404		CCSRCH391J50
C	3409,3410		CEAT100M50
C	3453,3454		CEAT470M16
C	3457,3460		CKSRYB104K16
C	3459		CCSRCH471J50

C FRONT IN ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
IC	6201		NJM4565MD
Q	6201		HN1C01FU
D	6201,6202,6204		1SS302
D	6203,6205,6206		UDZS5R1(B)
D	6303,6304		UMZU6.2N

MISCELLANEOUS

Mark	No.	Description	Part No.
L	6201	CHIP SOLID INDUCTOR	QTL1013
JA	6201	JACK	RKN1004
JA	6202	FRONT AV INPUT	AKX7019
JA	6301	USB CONNECTOR	XKP3086
JA	6351	PHONE JACK	AKN7029
KN	6201,6202	WRAPPING TERMINAL	VNF1084
KN	6351	WRAPPING TERMINAL	VNF1084
CN	6201	PLUG(3P)	KM200NA3

Mark	No.	Description	Part No.
	CN 6202	CONNECTOR	CKS3380
	CN 6301	PLUG(5P)	KM200NA5
	CN 6351	4P JUMPER CONNECTOR	52147-0410

RESISTORS

Mark	No.	Description	Part No.
		All Resistors	RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	JH 6302	PCB BINDER	VEF1040

CAPACITORS

Mark	No.	Description	Part No.
	C 6202,6208,6218,6224		CKSRYB104K16
	C 6204,6220,6226,6228		CKSRYB103K50
	C 6205,6206		CKSRYB221K50
	C 6209		CKSRYB105K6R3
	C 6210,6211,6234,6235		CEAT100M50
	C 6212		CKSRYB471K50
	C 6213		CKSQYB106K6R3
	C 6214-6216,6249-6251		CCSRCH101J50
	C 6219		CEJQ100M16
	C 6222,6227		CCSRCH220J50
	C 6223,6225		CEAT330M25
	C 6229		CKSRYB102K50
	C 6230-6232,6239,6246		CKSRYB103K50
	C 6233		CKSRYB472K50
	C 6236,6245,6247		CKSRYB104K16
	C 6237		CEAT100M50
	C 6240-6242,6356		CCSRCH102J50
	C 6243,6244		CEAL220M16
	C 6248		CKSRYB103K50
	C 6303		CKSRYB104K25
	C 6353,6354		CKSRYB822K50

D 232C & CONTROL ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 5801		HIN202EIBNZ
	Q 5801		2SC4154
	Q 5802		DTA114TUA
	Q 5806		2SA1366
	Q 5807		RT1N241M
	D 5804,5805		1SS352
	D 5806,5807		1SS357
	D 5809,5810		SIM-20STS1
	D 5813,5814		MC2848-11
	D 5815,5816		HZU5R1(B2)

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 5803-5807	CHIP SOLID INDUCTOR	QTL1013
	L 5809-5811	CHIP SOLID INDUCTOR	QTL1013
	JA 5801	9P D-SUB SOCKET	AKP1213
	JA 5802,5804-5806	JACK	VKB1243
	JA 5803	MINI JACK(4P) /W SW	XKN3015
	KN 5801,5802	SCREW PLATE	VNE1948
	CN 5801	23P SOCKET	XKP3082

RESISTORS

Mark	No.	Description	Part No.
		All Resistors	RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	U 5801	REMOTE RECEIVER UNIT	GP1UE284QKC1

CAPACITORS

Mark	No.	Description	Part No.
	C 5802,5811,5828		CKSRYB103K50
	C 5803		CCSRCH331J50
	C 5804,5805		CKSRYB102K50
	C 5807-5810		CKSRYB104K16
	C 5812,5829		CEAT101M16
	C 5830,5831		CKSRYB471K50
	C 5832-5834		CCSRCH100D50
	C 5837		CCSRCH101J50

E HDMI NETWORK ASSY (SC-LX81)

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC 11		NJM2846DL3-33
⚠	IC 21		NJM2846DL3-18
⚠	IC 31		NJM2886DL3-33
	IC 101		SII9135CTU
	IC 201		TC74VHC541FTS1
	IC 202		ICS571MLF
	IC 203		TC7WH74FU
	IC 204,205,208		TC7WH157FU
	IC 251		TC74VHC157FTS1
	IC 252		TC7SH08FUS1
	IC 301,351		SII9134CTU
⚠	IC 302,352		NJM2872BF05
	IC 401		ADV7800BSTZ-80
	IC 402		TC7WHU04FU
	IC 501		PEG118A
	IC 502		AYW7254
	IC 504		BU4094BCFV
	IC 505,911,1871		TC74VHC08FTS1
	IC 601		ADV7172KSTZ
	IC 801		AAT4618IGV-0.5-1
	IC 861		RTL8201CP-LF
	IC 881		AYW7255
	IC 891		HY57V281620FTP-6
	IC 921,1861		TC74VHCT08AFTS1
⚠	IC 1001		TPS54350PWP
⚠	IC 1021		LTC3850EGN
⚠	IC 1051		LT3505EMS8E
⚠	IC 1071		NJM2885DL1-05
	IC 1081		TC7WH125FU
	IC 1082		TC7WT125FU
	IC 1151		SII9185ACTU
	IC 1204		S-24CS02AFT
	IC 1208		TC7MB3257FK
	IC 1301		FLI2310-LF-CF
	IC 1351		M12L64322A-6TG
	IC 1381,1383,1384,1402		TC74LCX541FTS1
	IC 1382,1401,1403		TC7SZ125FU
	IC 1404		TC74LCX541FTS1
	IC 1701		UPD61111GM-100UEVA
⚠	IC 1702		NJM2885DL1-15
	IC 1703		KA5SDKAS01TSN
	IC 1901		K4H561638H-UCB3
⚠	IC 1902		S-1132B25-U5
	IC 1903		NJM12904V
	IC 1951		AYW7232
	Q 201		RT1P241M
	Q 301,351,1104,1203		DTC114YUA

Mark	No.	Description	Part No.
	Q 302,352		UMB1N
	Q 631,641,651,661		2SA1602A
	Q 671,681,1801,1811		2SA1602A
⚠	Q 1001		RTQ045N03
⚠	Q 1021,1022		SP8K1
	Q 1204		DTC114YUA
	Q 1281		HN1K02FU
	Q 1821,1831		2SA1602A
	D 301,351		UDZS5R1(B)
	D 551,1701		RB501V-40
⚠	D 1001		RLZ6.8B
	D 1021,1022,1052		RB160VA-40
⚠	D 1023,1024		RLZ5.6B
	D 1051		RB160M-30
	D 1101-1104		DAN202U
	D 1861		1SS352

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 101-104,301-305	CHIP BEADS	ATL7010
	L 105,106	CHIP SOLID INDUCTOR	QTL1013
	L 201	INDUCTOR	CTF1379
	L 202-204	CHIP SOLID INDUCTOR	QTL1013
	L 207,208	CHIP SOLID INDUCTOR	QTL1013
	L 251,252	CHIP SOLID INDUCTOR	QTL1013
	L 306-309,356-359	COIL	ATH7022
	L 351-355,401,402	CHIP BEADS	ATL7010
	L 403,405	CHIP SOLID INDUCTOR	QTL1013
	L 404,406,1001,1021	CHIP BEADS	ATL7010
	L 501,601	CHIP SOLID INDUCTOR	ATL7002
	L 602	CHIP SOLID INDUCTOR	ATL7002
	L 631,641,651,661	INDUCTOR	ATL7015
	L 671,681,1801,1811	INDUCTOR	ATL7015
	L 701,702,805,861	INDUCTOR	CTF1357
	L 704-707	CHIP FERRITE BEADS	ATF1211
	L 801	CHIP FERRITE BEADS	VTL1169
	L 802	COIL	VTH1043
	L 862,871,881,891	INDUCTOR	CTF1357
	L 863,864	COIL	VTH1056
	L 911,936	INDUCTOR	CTF1357
	L 1002	POWER INDUCTOR	ATH7059
	L 1022	INDUCTOR	CTH1261
	L 1023	INDUCTOR	ATH7060
	L 1051,1151-1153	CHIP BEADS	ATL7010
	L 1052	INDUCTOR	ATH7061
	L 1097-1099	INDUCTOR	CTF1386
	L 1301-1305	CHIP SOLID INDUCTOR	ATL7002
	L 1351,1901	CHIP SOLID INDUCTOR	ATL7002
	L 1381-1384	CHIP SOLID INDUCTOR	QTL1013
	L 1401-1404	CHIP SOLID INDUCTOR	QTL1013
	L 1701-1706,1902	FERRITE CORE	VTF1091
	L 1821,1831	INDUCTOR	ATL7015
	L 1861,1871	CHIP SOLID INDUCTOR	QTL1013
	L 1951	FERRITE CORE	VTF1091
	JA 301,351	HDMI CONNECTOR	AKP7225
	JA 701	RJ45 CONNECTOR TRNS	VKN2078
	JA 1101-1104	HDMI CONNECTOR	AKP7225
	X 101	CRYSTAL RESONATOR (28.322 MHz)	ASS7085
	X 401	CRYSTAL RESONATOR (28.63636 MHz)	ASS7069
	X 501	CERAMIC RESONATOR (15.7 MHz)	XSS3004
	X 701	CRYSTAL RESONATOR (24.576 MHz)	XSS3003
	X 702	CRYSTAL RESONATOR (25.0 MHz)	ASS7084
	X 791	CRYSTAL OSCILLATOR (32.768 kHz)	ASS1172
	X 1301	CRYSTAL RESONATOR (13.5 MHz)	ASS7070
	X 1701	CRYSTAL RESONATOR (27.0000 MHz)	BSS1123
	CN 201	23P SOCKET	XKP3083
	CN 502	13P SOCKET	XKP3077
	CN 601	CONNECTOR	CKS4898
	CN 801	CONNECTOR	AKM1276
	CN 902	5P CONNECTOR	VKN1374
	CN 1001	CONNECTOR	CKS3815
	CN 1002	15P SOCKET	XKP3078
	CN 1003	CONNECTOR	CKS1755
	CN 1701	22P CONNECTOR	VKN1426
	CN 1702	CONNECTOR	VKN2040
	JH 1	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
	R 101,103-105,108		RAB4CQ100J
	R 115,204		RAB4CQ680J
	R 119,320,322-330		RAB4CQ473J
	R 130-132,134-136		RAB4CQ100J
	R 141-144		ACN1275
	R 305,355,609,612		RS1/16SS6800F
	R 428,429,789		RAB4CQ330J
	R 432,433,1385-1388		RAB4CQ470J
	R 434,437,442,443		RAB4CQ473J
	R 446,447,450,708		RAB4CQ473J
	R 464,465,467,468		RAB4CQ472J
	R 480-483,741,761		RAB4CQ220J
	R 596		RAB4CQ101J
	R 610,611		RS1/16SS5601F
	R 633,643,653,663		RS1/16SS2200F
	R 634,644,654,664		RS1/16SS4700F
	R 673,683,1702		RS1/16SS2200F
	R 674,684		RS1/16SS4700F
	R 723		RS1/16S5101F
	R 724		RS1/16S3900F
	R 746,747,749		RAB4CQ100J
	R 769,771,1322-1324		RAB4CQ220J
	R 806,977,1031		RS1/16S0R0J
	R 824		RS1/16SS1003F
	R 851-854,1906,1907		RAB4CQ330J
	R 867		RS1/16S2001F
	R 868-871		RS1/16S49R9F
	R 919		RS1/10S102J
	R 1009,1056		RS1/16SS1002F
	R 1011		RS1/16SS2001F
	R 1016,1029,1030,1057		RS1/10S0R0J
	R 1021,1022,1025,1026		ACN7160
	R 1023		RS1/16SS4702F
	R 1024,1027		RS1/16SS1502F
	R 1028		RS1/16SS1202F
	R 1055		RS1/16SS6802F
	R 1071-1074,1905		RS1/16S0R0J
	R 1158,1159		RS1/16SS1501F
	R 1314-1317,1352		RAB4CQ100J
	R 1327,1354-1361,1717		RAB4CQ220J
	R 1389,1729,1730,1740		RAB4CQ560J
	R 1403,1404,1409,1410		RAB4CQ0R0J
	R 1405,1406,1411,1412		RAB4CQ470J

Mark	No. Description	Part No.
	R 1701,1901,1902	RS1/10S0R0J
	R 1703	RS1/16SS1500F
	R 1706,1707	RS1/16SS9100F
	R 1718	RAB4CQ220J
	R 1726	RAB4CQ0R0J
	R 1741,1743,1748,1754	RAB4CQ560J
	R 1755	RAB4CQ560J
	R 1792-1794	RAB4CQ473J
	R 1802,1803,1812,1813	RS1/16SS8200F
	R 1804,1814,1824,1834	RS1/16SS3900F
	R 1822,1823,1832,1833	RS1/16SS8200F
	R 1903,1904	RS1/16SS1001F
	R 1914,1915	RAB4CQ330J
	Other Resistors	RS1/16SS###J

CAPACITORS

Mark	No. Description	Part No.
	C 11,31,322,372	CKSRYB104K16
	C 12,32,1072	CKSQYB225K10
	C 21,106-108,110	CKSSYB104K10
	C 22,1702	CKSQYB475K6R3
	C 23,1703	CEVW221M4
	C 33	CEVW101M6R3
	C 101,102,301,302	DCH1165
	C 103,104,303-305	CKSQYB106K6R3
	C 105,113,121,122	CKSSYB105K6R3
	C 109,111,131,203	CKSSYB103K16
	C 114-120,123-126	CKSSYB104K10
	C 127,463,740,1339	CCSSCH120J50
	C 128,462,741	CCSSCH100D50
	C 129,130,133,306	CKSSYB105K6R3
	C 132,134-139,201	CKSSYB104K10
	C 140-153,155,156	CKSSYB471K50
	C 157,401,402,503,1705,1906	VCH1234
	C 159,160,1400	ACH7306
	C 202	CEVW4R7M35
	C 204,310,360,412	CKSSYB103K16
	C 206-208,211,251	CKSSYB104K10
	C 210,333-336	CKSSYB471K50
	C 216-218,252,421	CKSSYB102K50
	C 219,220,319,369	VCG1063
	C 253,307,309,312	CKSSYB104K10
	C 308,311,313-315	CKSSYB105K6R3
	C 316,317,324,357	CKSSYB104K10
	C 318,356,358,361	CKSSYB105K6R3
	C 320,321,370,371	CKSRYB105K10
	C 325-332,375-382	VCG1066
	C 351,352	DCH1165
	C 353-355,417,430	CKSQYB106K6R3
	C 359,362,366,367	CKSSYB104K10
	C 363-365,368,404	CKSSYB105K6R3
	C 374,403,405-411	CKSSYB104K10
	C 383-386,481-485	CKSSYB471K50
	C 413	CKSSYB823K10
	C 414,435,436,501	CKSSYB103K16
	C 415	CKSRYB824K10
	C 416	CKSSYB393K10
	C 418,420,422-429	CKSSYB104K10
	C 419,434,601,611	CEVW101M16
	C 431,437,438	CKSSYB104K10
	C 432,1157	CKSQYB106K6R3

Mark	No. Description	Part No.
	C 433,505,610,791	CKSSYB105K6R3
	C 439,440,1303,1704	DCH1201
	C 441-443,445-449	CKSSYB104K10
	C 461,502,504,506	CKSSYB104K10
	C 511,551,552	CKSSYB104K10
	C 512,735,1033,1034	CKSSYB102K50
	C 602-609,612,614	CKSSYB104K10
	C 613,934,935,937	CKSSYB103K16
	C 615,617,631,641	CKSSYB104K10
	C 619-622,718,721	CKSSYB471K50
	C 632,642,652,662	CCSSCH101J50
	C 633,643,653,663	CCSSCH560J50
	C 651,661,671,681	CKSSYB104K10
	C 672,682,951	CCSSCH101J50
	C 673,683	CCSSCH560J50
	C 701,702,704-709	CKSSYB104K10
	C 710,742,743	CEVW100M16
	C 711-717,719,722	CKSSYB104K10
	C 720,867,870,883	CEVW220M16
	C 723,936	CEVW470M6R3
	C 724-734,736-739	CKSSYB104K10
	C 744-750,792,860	CKSSYB471K50
	C 801,803-805,1014	CKSRYB104K16
	C 802,807,1302,1305	CEVW101M16
	C 861-865,868,871	CKSSYB104K10
	C 866,869,881,895	CKSSYB471K50
	C 872,874,882	CKSSYB104K10
	C 873	CEVW330M16
	C 875,1015,1046,1047	CCSRCH102J50
	C 891-894,900,911	CKSSYB104K10
	C 897-899,912,921	CKSSYB471K50
	C 922,950,1081,1082	CKSSYB104K10
	C 932	VCH1268
	C 938,1166,1313	CKSSYB103K16
	C 939	CCSSCH180J50
	C 940	CCSSCH150J50
	C 946	CSZS330M6R3
	C 1001	CKSQYB104K25
	C 1002	CEVW101M25
	C 1003,1004,1021,1022	CCG1195
	C 1005,1011	CKSRYB682K25
	C 1006,1039	CCSRCH681J50
	C 1007,1029-1031,1041	CKSRYB104K25
	C 1008	CKSQYB105K16
	C 1009,1052,1151,1156	BCG1059
	C 1023,1027	CCG1233
	C 1024,1026	CKSQYB475K10
	C 1025,1028	CCSRCH101J50
	C 1032	CKSRYB105K10
	C 1035,1040	CKSRYB223K16
	C 1036	CKSRYB222K50
	C 1037	CCSRCH470J50
	C 1038	CCSRCH121J50
	C 1042,1053	CKSRYB104K25
	C 1051	CKSQYB105K25
	C 1054	CCSSCH220J50
	C 1056	CCSRCH151J50
	C 1057,1071,1099,1701	CKSRYB104K16
	C 1101-1104,1352,1363	VCG1063

Mark	No.	Description	Part No.
C	1152-1155,1158-1165		CKSSYB104K10
C	1167,1207,1208,1306		CKSSYB104K10
C	1168-1175,1323,1333		CKSSYB471K50
C	1301,1705,1906		VCH1234
C	1308-1312,1319-1322		CKSSYB104K10
C	1314-1318,1353-1362		CKSSYB105K6R3
C	1324-1332,1335-1338		CKSSYB104K10
C	1334,1343-1348,1350		CKSSYB471K50
C	1340		CCSSCH120J50
C	1341,1381-1384		CKSSYB104K10
C	1342,1708		CEVW101M16
C	1349,1917		CCSSCH471J16
C	1351		ACH7174
C	1364-1368,1385-1388		CKSSYB471K50
C	1369		CKSRYB103K25
C	1399		VCG1063
C	1401-1404,1711-1717		CKSSYB104K10
C	1405-1408,1748-1754		CKSSYB471K50
C	1706,1709,1904,1905		DCH1201
C	1710		CKSRYB104K16
C	1719-1721,1723-1727		CKSSYB104K10
C	1729-1736,1738,1739		CKSSYB104K10
C	1740,1741		CCSSCK1R0C50
C	1742		CKSSYB102K50
C	1743,1745,1746,1801		CKSSYB104K10
C	1747,1907-1915		CKSSYB105K6R3
C	1802,1803,1812,1813		CCSSCH470J50
C	1811,1821,1831,1861		CKSSYB104K10
C	1822,1823,1832,1833		CCSSCH470J50
C	1871,1916,1951		CKSSYB104K10
C	1901-1903		CKSQYB225K10
C	1918-1922		CKSSYB471K50

E HDMI NETWORK ASSY (SC-LX71)

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠ IC	11		NJM2846DL3-33
⚠ IC	21		NJM2846DL3-18
⚠ IC	31		NJM2886DL3-33
IC	101		SII9135CTU
IC	201		TC74VHC541FTS1
IC	202		ICS571MLF
IC	203		TC7WH74FU
IC	204,205,208		TC7WH157FU
IC	251		TC74VHC157FTS1
IC	252		TC7SH08FUS1
IC	351		SII9134CTU
⚠ IC	352		NJM2872BF05
IC	401		ADV7800BSTZ-80
IC	402		TC7WHU04FU
IC	501		PEG118A
IC	502		AYW7254
IC	504		BU4094BCFV
IC	505,911,1871		TC74VHC08FTS1
IC	601		ADV7172KSTZ
IC	801		AAT4618IGV-0.5-1
IC	861		RTL8201CP-LF
IC	881		AYW7255
IC	891		HY57V281620FTP-6
IC	921,1861		TC74VHCT08AFTS1
⚠ IC	1001		TPS54350PWP
⚠ IC	1021		LTC3850EGN
⚠ IC	1051		LT3505EMS8E
⚠ IC	1071		NJM2885DL1-05
IC	1081		TC7WH125FU
IC	1082		TC7WT125FU
IC	1151		SII9185ACTU
IC	1204		S-24CS02AFT
IC	1208		TC7MB3257FK
IC	1301		FLI2310-LF-CF
IC	1351		M12L64322A-6TG
IC	1381,1383,1384,1402		TC74LCX541FTS1
IC	1382,1401,1403		TC7SZ125FU
IC	1404		TC74LCX541FTS1
IC	1701		UPD61111GM-100UEVA
⚠ IC	1702		NJM2885DL1-15
IC	1703		KA5SDKAS01TSN
IC	1901		K4H561638H-UCB3
⚠ IC	1902		S-1132B25-U5
IC	1903		NJM12904V
IC	1951		AYW7232
Q	201		RT1P241M
Q	351,1104,1203,1204		DTC114YUA
Q	352		UMB1N
Q	631,641,651,661		2SA1602A
Q	671,681,1821		2SA1602A
⚠ Q	1001		RTQ045N03
⚠ Q	1021,1022		SP8K1
Q	1281		HN1K02FU
D	351		UDZS5R1(B)
D	551,1701		RB501V-40
⚠ D	1001		RLZ6.8B
D	1021,1022,1052		RB160VA-40
⚠ D	1023,1024		RLZ5.6B
D	1051		RB160M-30
D	1101-1104		DAN202U
D	1861		1SS352

MISCELLANEOUS

Mark	No.	Description	Part No.
L	101-104,351-355	CHIP BEADS	ATL7010
L	105,106	CHIP SOLID INDUCTOR	QTL1013
L	201	INDUCTOR	CTF1379
L	202-204	CHIP SOLID INDUCTOR	QTL1013
L	207,208	CHIP SOLID INDUCTOR	QTL1013
L	251,252	CHIP SOLID INDUCTOR	QTL1013
L	356-359	COIL	ATH7022
L	401,402,404,406	CHIP BEADS	ATL7010
L	403,405	CHIP SOLID INDUCTOR	QTL1013
L	501,601	CHIP SOLID INDUCTOR	ATL7002
L	602	CHIP SOLID INDUCTOR	ATL7002
L	631,641,651,661	INDUCTOR	ATL7015
L	671,681,1821	INDUCTOR	ATL7015
L	701,702,805,861	INDUCTOR	CTF1357
L	704-707	CHIP FERRITE BEADS	ATF1211
L	801	CHIP FERRITE BEADS	VTL1169
L	802	COIL	VTH1043
L	862,871,881,891	INDUCTOR	CTF1357
L	863,864	COIL	VTH1056
L	911,936	INDUCTOR	CTF1357

Mark	No.	Description	Part No.
	L 1001,1021,1051	CHIP BEADS	ATL7010
	L 1002	POWER INDUCTOR	ATH7059
	L 1022	INDUCTOR	CTH1261
	L 1023	INDUCTOR	ATH7060
	L 1052	INDUCTOR	ATH7061
	L 1097-1099	INDUCTOR	CTF1386
	L 1151-1153	CHIP BEADS	ATL7010
	L 1301-1305	CHIP SOLID INDUCTOR	ATL7002
	L 1351,1901	CHIP SOLID INDUCTOR	ATL7002
	L 1381-1384	CHIP SOLID INDUCTOR	QTL1013
	L 1401-1404	CHIP SOLID INDUCTOR	QTL1013
	L 1701-1706,1902	FERRITE CORE	VTF1091
	L 1861,1871	CHIP SOLID INDUCTOR	QTL1013
	L 1951	FERRITE CORE	VTF1091
	JA 351,1101-1104	HDMI CONNECTOR	AKP7225
	JA 701	RJ45 CONNECTOR TRNS	VKN2078
	X 101	CRYSTAL RESONATOR (28.322 MHz)	ASS7085
	X 401	CRYSTAL RESONATOR (28.63636 MHz)	ASS7069
	X 501	CERAMIC RESONATOR (15.7 MHz)	XSS3004
	X 701	CRYSTAL RESONATOR (24.576 MHz)	XSS3003
	X 702	CRYSTAL RESONATOR (25.0 MHz)	ASS7084
	X 791	CRYSTAL OSCILLATOR (32.768 kHz)	ASS1172
	X 1301	CRYSTAL RESONATOR (13.5 MHz)	ASS7070
	X 1701	CRYSTAL RESONATOR (27.0000 MHz)	BSS1123
	CN 201	23P SOCKET	XKP3083
	CN 502	13P SOCKET	XKP3077
	CN 601	CONNECTOR	CKS4898
	CN 801	CONNECTOR	AKM1276
	CN 902	5P CONNECTOR	VKN1374
	CN 1001	CONNECTOR	CKS3815
	CN 1002	15P SOCKET	XKP3078
	CN 1003	CONNECTOR	CKS1755
	CN 1701	22P CONNECTOR	VKN1426
	CN 1702	CONNECTOR	VKN2040
	JH 1	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
	R 101,103-105,108		RAB4CQ100J
	R 115,204		RAB4CQ680J
	R 119,320,322-330		RAB4CQ473J
	R 130-132,134-136		RAB4CQ100J
	R 141-144		ACN1275
	R 355,609,612		RS1/16SS6800F
	R 428,429,789		RAB4CQ330J
	R 432,433,1385-1388		RAB4CQ470J
	R 434,437,442,443		RAB4CQ473J
	R 446,447,450,708		RAB4CQ473J
	R 464,465,467,468		RAB4CQ472J
	R 480-483,741,761		RAB4CQ220J
	R 596		RAB4CQ101J
	R 610,611		RS1/16SS5601F
	R 633,643,653,663		RS1/16SS2200F
	R 634,644,654,664		RS1/16SS4700F
	R 673,683,1702		RS1/16SS2200F
	R 674,684		RS1/16SS4700F
	R 723		RS1/16S5101F
	R 724		RS1/16S3900F
	R 746,747,749		RAB4CQ100J
	R 769,771,1322-1324		RAB4CQ220J
	R 806,977,1031		RS1/16S0R0J
	R 824		RS1/16SS1003F
	R 851-854,1906,1907		RAB4CQ330J
	R 867		RS1/16S2001F
	R 868-871		RS1/16S49R9F
	R 919		RS1/10S102J
	R 1009,1056		RS1/16SS1002F
	R 1011		RS1/16SS2001F
	R 1016,1029,1030,1057		RS1/10S0R0J
	R 1021,1022,1025,1026		ACN7160
	R 1023		RS1/16SS4702F
	R 1024,1027		RS1/16SS1502F
	R 1028		RS1/16SS1202F
	R 1055		RS1/16SS6802F
	R 1071-1074,1905		RS1/16S0R0J
	R 1158,1159		RS1/16SS1501F
	R 1314-1317,1352		RAB4CQ100J
	R 1327,1354-1361,1717		RAB4CQ220J
	R 1389,1729,1730,1740		RAB4CQ560J
	R 1403,1404,1409,1410		RAB4CQ0R0J
	R 1405,1406,1411,1412		RAB4CQ470J
	R 1701,1901,1902		RS1/10S0R0J
	R 1703		RS1/16SS1500F
	R 1706,1707		RS1/16SS9100F
	R 1718		RAB4CQ220J
	R 1726		RAB4CQ0R0J
	R 1741,1743,1748,1754		RAB4CQ560J
	R 1755		RAB4CQ560J
	R 1792-1794		RAB4CQ473J
	R 1822,1823		RS1/16SS8200F
	R 1824		RS1/16SS3900F
	R 1903,1904		RS1/16SS1001F
	R 1914,1915		RAB4CQ330J
	Other Resistors		RS1/16SS###J

CAPACITORS

Mark	No.	Description	Part No.
	C 11,31,372,801		CKSRYB104K16
	C 12,32,1072		CKSQYB225K10
	C 21,106-108,110		CKSSYB104K10
	C 22,1702		CKSQYB475K6R3
	C 23,1703		CEVW221M4
	C 33		CEVW101M6R3
	C 101,102,351,352		DCH1165
	C 103,104,353-355		CKSQYB106K6R3
	C 105,113,121,122		CKSSYB105K6R3
	C 109,111,131,203		CKSSYB103K16
	C 114-120,123-126		CKSSYB104K10
	C 127,463,740,1339		CCSSCH120J50
	C 128,462,741		CCSSCH100D50
	C 129,130,133,356		CKSSYB105K6R3
	C 132,134-139,201		CKSSYB104K10
	C 140-153,155,156		CKSSYB471K50
	C 157,401,402,503,1705,1906		VCH1234
	C 159,160,1400		ACH7306
	C 202		CEVW4R7M35
	C 204,360,412,414		CKSSYB103K16
	C 206-208,211,251		CKSSYB104K10
	C 210,383-386		CKSSYB471K50
	C 216-218,252,421		CKSSYB102K50
	C 219,220,369		VCG1063
	C 253,357,359,362		CKSSYB104K10

Mark	No. Description	Part No.
C	358,361,363-365	CKSSYB105K6R3
C	366,367,374,403	CKSSYB104K10
C	368,404,433,505	CKSSYB105K6R3
C	370,371,1032	CKSRYB105K10
C	375-382	VCG1066
C	405-411,418,420	CKSSYB104K10
C	413	CKSSYB823K10
C	415	CKSRYB824K10
C	416	CKSSYB393K10
C	417,430,432,1157	CKSQYB106K6R3
C	419,434,601,611	CEVW101M16
C	422-429,431,437	CKSSYB104K10
C	435,436,501,613	CKSSYB103K16
C	438,441-443	CKSSYB104K10
C	439,440,1303,1704	DCH1201
C	445-449,461,502	CKSSYB104K10
C	481-485,619-622	CKSSYB471K50
C	504,506,511,551	CKSSYB104K10
C	512,735,1033,1034	CKSSYB102K50
C	552,602-609,612	CKSSYB104K10
C	610,791,1314-1318	CKSSYB105K6R3
C	614,615,617,631	CKSSYB104K10
C	632,642,652,662	CCSSCH101J50
C	633,643,653,663	CCSSCH560J50
C	641,651,661,671	CKSSYB104K10
C	672,682,951	CCSSCH101J50
C	673,683	CCSSCH560J50
C	681,701,702	CKSSYB104K10
C	704-709,711-717	CKSSYB104K10
C	710,742,743	CEVW100M16
C	718,721,744-750	CKSSYB471K50
C	719,722,724-734	CKSSYB104K10
C	720,867,870,883	CEVW220M16
C	723,936	CEVW470M6R3
C	736-739,861-865	CKSSYB104K10
C	792,860,866,869	CKSSYB471K50
C	802,807,1302,1305	CEVW101M16
C	803-805,1014,1057	CKSRYB104K16
C	868,871,872,874	CKSSYB104K10
C	873	CEVW330M16
C	875,1015,1046,1047	CCSRCH102J50
C	881,895,897-899	CKSSYB471K50
C	882,891-894,900	CKSSYB104K10
C	911,922,950,1081	CKSSYB104K10
C	912,921,1168-1175	CKSSYB471K50
C	932	VCH1268
C	934,935,937,938	CKSSYB103K16
C	939	CCSSCH180J50
C	940	CCSSCH150J50
C	946	CSZS330M6R3
C	1001	CKSQYB104K25
C	1002	CEVW101M25
C	1003,1004,1021,1022	CCG1195
C	1005,1011	CKSRYB682K25
C	1006,1039	CCSRCH681J50
C	1007,1029-1031,1041	CKSRYB104K25
C	1008	CKSQYB105K16
C	1009,1052,1151,1156	BCG1059
C	1023,1027	CCG1233
C	1024,1026	CKSQYB475K10
C	1025,1028	CCSRCH101J50
C	1035,1040	CKSRYB223K16
C	1036	CKSRYB222K50
C	1037	CCSRCH470J50
C	1038	CCSRCH121J50
C	1042,1053	CKSRYB104K25
C	1051	CKSQYB105K25
C	1054	CCSSCH220J50
C	1056	CCSRCH151J50
C	1071,1099,1701,1710	CKSRYB104K16
C	1082,1152-1155	CKSSYB104K10
C	1101-1104,1352,1363	VCG1063
C	1158-1165,1167,1207	CKSSYB104K10
C	1166,1313	CKSSYB103K16
C	1208,1306,1308-1312	CKSSYB104K10
C	1301,1705,1906	VCH1234
C	1319-1322,1324-1332	CKSSYB104K10
C	1323,1333,1334	CKSSYB471K50
C	1335-1338,1341	CKSSYB104K10
C	1340	CCSSCH120J50
C	1342,1708	CEVW101M16
C	1343-1348,1350	CKSSYB471K50
C	1349,1917	CCSSCH471J16
C	1351	ACH7174
C	1353-1362,1747	CKSSYB105K6R3
C	1364-1368,1385-1388	CKSSYB471K50
C	1369	CKSRYB103K25
C	1381-1384,1401-1404	CKSSYB104K10
C	1399	VCG1063
C	1405-1408,1748-1754	CKSSYB471K50
C	1706,1709,1904,1905	DCH1201
C	1711-1717,1719-1721	CKSSYB104K10
C	1723-1727,1729-1736	CKSSYB104K10
C	1738,1739,1743,1745	CKSSYB104K10
C	1740,1741	CCSSCK1R0C50
C	1742	CKSSYB102K50
C	1746,1821,1861,1871	CKSSYB104K10
C	1822,1823	CCSSCH470J50
C	1901-1903	CKSQYB225K10
C	1907-1915	CKSSYB105K6R3
C	1916,1951	CKSSYB104K10
C	1918-1922	CKSSYB471K50

F INTERFACE ASSY

SEMICONDUCTORS

Mark	No. Description	Part No.
⚠ D	7101	D3SBA20(B)

MISCELLANEOUS

Mark	No. Description	Part No.
H	7101,7102 FUSE CLIP	AKR7001
J	7061 JUMPER WIRE	D20PDY0415E
KN	7001-7006 WRAPPING TERMINAL	VNF1084
CN	7001 7P PLUG	XKP3063
CN	7002,7005,7006 CONNECTOR	CKS1730
CN	7003,7004 CONNECTOR	CKS1727
CN	7007 PLUG	CKS1724
CN	7008,7014,7021 23P PLUG	XKP3071
CN	7009,7013 CONNECTOR	CKS3813
CN	7011 15P PLUG	XKP3067

Mark	No.	Description	Part No.
	CN 7012	CONNECTOR	CKS1721
	CN 7031	27P CONNECTOR	VKN1258
	CN 7032,7042	CONNECTOR	CKS3384
	CN 7041	CONNECTOR	CKS3386
	CN 7051	CONNECTOR	CKS3382
	CN 7062	CONNECTOR	CKS3380
	CN 7101	2P TOP POST	B2B-EH

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	JH 7002-7005	PCB BINDER	VEF1040
	JH 7061	4P CABLE HOLDER	51048-0400
	JP 7071	4P HOUSING ASSY	ADX7676
	JP 7102	HOUSING ASSY	ADX7635
	JP 7103	HOUSING ASSY	ADX7634
	JP 7104	HOUSING ASSY	ADX7636

CAPACITORS

Mark	No.	Description	Part No.
	C 7101		CFTLA394J50
	C 7102,7105-7109		CCSRCH102J50
	C 7104		CEAT682M25

G COMPONENT ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 6001-6004		TC74LVX4052FT
	IC 6005		TC74LVX4053FT
	IC 6006		LA7213
	IC 6007,6008		NJM2581M
	IC 6009,6012		TC4094BFN
	IC 6010,6013-6015		TC74VHCT08AFTS1
	Q 6001-6007,6017,6018		2SA1602A
	Q 6008,6019,6021		RT1N241M
⚠	Q 6015		2SC4154
⚠	Q 6016		2SA1602A
	Q 6020		2SA1602A
	D 6001		1SS352
	D 6002,6003		RR264M-400
	D 6010		UDZS5R1(B)

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 6001	CHIP SOLID INDUCTOR	ATL7002
	JA 6001	PIN JACK(3P)	AKB7203
	JA 6002,6003	PIN JACK(6P)	AKB7204
	JA 6004	JACK	AKN-209
	KN 6001	SCREW PLATE	VNE1948
	CN 6002	PLUG	CKS3545
	CN 6004	13P PLUG	XKP3066
	CN 6006	16P CONNECTOR	VKN1420
	CN 6007	5P HOUSING ASSY	ADX7654
	CN 6008	5P HOUSING ASSY	ADX7674
	CN 6009	30P SOCKET	XKP3092

RESISTORS

Mark	No.	Description	Part No.
	R 6007,6012,6017		RS1/16S1103D
	Other Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
	C 6004,6048,6049,6060		CCSRCH102J50
	C 6012,6013,6016,6017		CKSRYB103K50
	C 6018,6021,6024		CEAT100M50
	C 6019,6020,6022,6023		CKSRYB103K50
	C 6025		CEAT3R3M50
	C 6026,6027,6111,6112		CKSRYB103K50
	C 6028,6038,6039		CEAT101M10
	C 6043-6045,6050,6051		CEAT101M10
	C 6046,6047,6058,6059		CKSRYB105K10
	C 6055-6057		CEAT101M10
	C 6061,6065,6069,6071		CCSRCH102J50
	C 6064,6070,6072,6074		CKSRYB105K10
	C 6068		CKSRYB105K16
	C 6073,6075,6085,6087		CCSRCH102J50
	C 6084,6086,6088,6091		CKSRYB105K10
	C 6089,6092,6095,6100		CCSRCH102J50
	C 6090,6093		ACH1479
	C 6094,6099,6101,6105		CKSRYB105K10
	C 6096,6103,6104,6143		CEAT101M16
	C 6097,6098		CKSRYB224K10
	C 6102,6106,6108,6138		CCSRCH102J50
	C 6107,6137,6147,6148		CKSRYB105K10
	C 6110,6115-6117		CKSRYB104K16
	C 6113,6114,6121-6124		CCSRCH100D50
	C 6125-6136,6184		CKSRYB103K50
	C 6144,6174,6176,6177		CEAT101M16
	C 6146,6149,6150,6153		CCSRCH102J50
	C 6151,6152,6155,6157		CKSRYB105K10
	C 6154,6156,6159,6160		CCSRCH102J50
	C 6158,6161,6162,6165		CKSRYB105K10
	C 6163,6164,6172,6173		CCSRCH102J50
	C 6175,6181,6197-6199		CCSRCH100D50
	C 6179,6180,6182,6183		CEAT101M16
	C 6185,6187		CKSRYB105K10
	C 6186,6188,6196		CCSRCH102J50
	C 6189-6191		CEAT100M50

H COMPOSITE S ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 6501,6512		TC4094BFN
	IC 6502,6513		LA7109
	IC 6505,6506,6508,6509		TC74HC4051AFT
	IC 6510		LA7213
	IC 6511		TC74HC4053AFT
	IC 6516-6518		NJM2505AF
	Q 6501-6508		IMX25
	Q 6509		2SA1602A
	Q 6510		RT1N241M
	Q 6516,6524,6525		2SC4154
	D 6501		1SS352
	D 6502,6503		RR264M-400
	D 6504-6508		DAN217U

MISCELLANEOUS

Mark	No.	Description	Part No.
	JA 6501,6502	PIN JACK(4P)	XKB3017
	JA 6503	COMB.JACK(S+1P)	AKB7199
	JA 6504-6507	COMB.JACK(2S+2P)	AKB7200
	JA 6509	JACK	XKB3069
	KN 6501-6503	SCREW PLATE	VNE1948
	CN 6501	CONNECTOR	CKS3374
	CN 6502	19P CONNECTOR	52044-1945
	CN 6503	PLUG	CKS3545

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
	C 6501,6503,6509,6547		CKSRYB105K10
	C 6502,6504,6506,6508		CCSRCH102J50
	C 6505,6507,6670-6673		CKSRYB105K16
	C 6510,6548,6550-6555		CCSRCH102J50
	C 6511,6512,6519,6520		CCSRCH101J50
	C 6517,6518,6525,6526		CCSRCH331J50
	C 6527,6528,6535,6536		CCSRCH101J50
	C 6533,6534,6541,6542		CCSRCH331J50
	C 6544,6599,6600,6605		CKSRYB103K50
	C 6549,6556,6558,6567		CEAT101M10
	C 6557,6559,6566,6568		CKSRYB104K16
	C 6560-6565,6576,6578		CCSRCH181J50
	C 6581,6586,6587,6601		CEAT101M10
	C 6584,6585		CCSRCH181J50
	C 6598		CEAT100M50
	C 6602-6604,6641,6643		CKSRYB104K16
	C 6606,6608,6609,6611		CKSRYB103K50
	C 6607,6610,6613		CEAT220M50
	C 6612,6648,6694,6698		CKSRYB103K50
	C 6620,6621,6662-6667		CEAT101M16
	C 6624		CKSRYB105K10
	C 6625,6634-6639,6660		CCSRCH102J50
	C 6640,6642		CEAT101M10
	C 6650-6655,6689		CCSRCH100D50
	C 6661,6668,6669,6674		CCSRCH102J50
	C 6675,6679-6681		CCSRCH102J50
	C 6676-6678,6682-6684		CKSRYB105K16
	C 6685-6687,6692,6693		CCSRCH102J50
	C 6688		CEAT101M16
	C 6690,6691		CKSRYB105K16
	C 6696,6697,6699,6700		CKSQYB106K6R3
	C 6701,6704		CKSRYB103K50
	C 6702,6703		CKSQYB106K6R3
	C 6708-6710,6712		CEAT220M50
	C 6714-6716		CEAT220M50
	C 6717-6722		CKSRYB104K16

I FRONT BRIDGE ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
	CN 7701	PLUG(6P)	KM200NA6R
	CN 7704	19P CONNECTOR	52044-1945
	CN 7705,7708	CONNECTOR	CKS3374
	CN 7706	CONNECTOR	CKS3378
	CN 7707	CONNECTOR	CKS3382
	CN 7709	PLUG(3P)	KM200NA3
	CN 7710	27P CONNECTOR	VKN1287
	7701	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	JH 7702	PCB BINDER	VEF1040

CAPACITORS

Mark	No.	Description	Part No.
	C 7702,7704		CCSRCH102J50
	C 7703		CKSRYB103K50
	C 7711-7714		CCSRCH100D50
	C 7715		CCSRCH181J50

J V-BRIDGE ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
	CN 8601,8602	CONNECTOR	CKS3573

CAPACITORS

Mark	No.	Description	Part No.
	C 8602-8604		CKSRYB103K50

K DISPLAY ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 8001		PDC179A8
	IC 8002		GP1UE274XKC1
⚠	IC 8004		S-1200B33-M5
	IC 8201		PE5615A
	Q 8001-8007		RT1N431M
	Q 8009		2SA1602A
	Q 8010		RT1N241M
	Q 8012		2SK2034
	D 8001,8003,8005,8007		SLR-343VC(NPQ)
	D 8009,8013		SLR343BC4T(JKLM)
	D 8011		SLR343WBCT(MNPQ)
	D 8015,8016,8202		1SS352
	D 8017,8201		MC2848-11
	D 8019		RB751V-40
	D 8020		1SS302

MISCELLANEOUS

Mark	No.	Description	Part No.
	L 8201	INDUCTOR	CTF1385
	J 9201	3P JUMPER WIRE	D20PDD0305E
	J 9203	4PJUMPER WIRE	D20PDD0410E
	KN 8201	FL HOLDER(FE)	VNF1096
	V 8201	FL TUBE DISPLAY	AAV7113
	S 8001-8012,8015-8020	SWITCH	VSG1024
	S 8023	SWITCH	VSG1024
	S 8024	ROTARY ENCODER	ASX7051
	X 8002	CRYSTAL OSCILLATOR CRYSTAL OSC (15.0 MHz)	CSS1653
	X 8201	CERAMIC RESONATOR (5.00 MHz)	VSS1142
	CN 8001	29P CONNECTOR	VKN1872
	CN 8002	9P CONNECTOR	VKN1269

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	JH 8001	3P CABLE HOLDER	51048-0300
	JH 8003	4P CABLE HOLDER	51048-0400
	JH 8201	6P HOUSING ASSY	ADX7675

CAPACITORS

Mark	No.	Description	Part No.
	C 8001-8007		CCSRCH101J50
	C 8008		CCSRCH471J50
	C 8009,8015,8016,8018		CKSRYB104K16
	C 8012,8013		CCSRCH150J50
	C 8014,8030,8031,8228		CKSRYB105K10
	C 8019-8021,8202,8223		CKSRYB102K50
	C 8022,8027,8034,8035		CKSRYB103K50
	C 8023,8025,8026,8233		CCSRCH102J50
	C 8024		ACH7272

Mark	No.	Description	Part No.
	C 8032,8033,8036,8224		CKSRYB104K16
	C 8037		CCSRCH151J50
	C 8201,8230		CKSRYB104K50
	C 8203		CEAT101M35
	C 8204-8220,8226		CKSRYB471K50
	C 8221		ACH7268
	C 8222,8232		CKSRYB103K50
	C 8225,8227		CKSRYB104K16
	C 8229		CKSRYB102K50
	C 8231		CEAT470M50

L VOL ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
	S 8401	ROTARY ENCODER	ASX7049
	JH 8401	3P CABLE HOLDER	51048-0300

CAPACITORS

Mark	No.	Description	Part No.
	C 8401,8402		CKSRYB103K50

M POWER SW ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	Q 8501		RT1N431M
	D 8502		SLR343BC4T(JKLM)

MISCELLANEOUS

Mark	No.	Description	Part No.
	S 8501	SWITCH	VSG1024

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

MISCELLANEOUS

Mark	No.	Description	Part No.
	JH 8501	4P CABLE HOLDER	51048-0400

CAPACITORS

Mark	No.	Description	Part No.
	C 8501		CCSRCH101J50

N PRE BRIDGE ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
	CN 6951	19P CONNECTOR	52044-1945
	CN 6952	21P PLUG	XKP3070
	CN 6953	FLOATING CONNECTOR	AKP7227

O ICE BUFFER ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 6800,6820,6840,6860		UPC4570G2-A
	IC 6880,6900,6920		UPC4570G2-A

MISCELLANEOUS

Mark	No.	Description	Part No.
	J 6800	JUMPER WIRE	D20PDY0410E
	KN 6800,6801	SCREW PLATE	VNE1948
	CN 6800	FLOATING CONNECTOR	AKM7086
	CN 6810	19P PLUG	XKP3069
	CN 6820	17P PLUG	XKP3068
	CN 6830	5P SOCKET	XKP3073
	JH 6800	4P CABLE HOLDER	51048-0400

RESISTORS

Mark	No.	Description	Part No.
	R 6810,6811,6830,6831		RN1/16SC10R0D
	R 6850,6851,6870,6871		RN1/16SC10R0D
	R 6890,6891,6910,6911		RN1/16SC10R0D
	R 6930,6931		RN1/16SC10R0D
	Other Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
	C 6801,6802,6821,6822		CEJQ221M16
	C 6803,6804,6823,6824		CFHXSQ103J16
	C 6807,6808,6817,6818		CCSRCH102J50
	C 6827,6828,6837,6838		CCSRCH102J50
	C 6841,6842,6861,6862		CEJQ221M16
	C 6843,6844,6863,6864		CFHXSQ103J16
	C 6847,6848,6857,6858		CCSRCH102J50
	C 6867,6868		CCSRCH102J50
	C 6881,6882,6901,6902		CEJQ221M16
	C 6883,6884,6903,6904		CFHXSQ103J16
	C 6921,6922		CEJQ221M16
	C 6923,6924		CFHXSQ103J16

P ICE INTERFACE ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
	CN 3800	19P SOCKET	XKP3080
	CN 3801	17P SOCKET	XKP3079
	CN 3810,3840,3870	5P SOCKET	XKP3073
	CN 3820,3830,3850,3860	PLUG	CKS1750

Q ICEPOWER AMP ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC 4000,4001		BU7262SFVM
	IC 4003		TC74VHC04FTS1
	IC 4004		TC74VHC08FTS1
	IC 4005		HA17431GLTPA
	IC 4006		TC7WH08FU
⚠	IC 4101,4201,4301,4401		ICC3-AVR
	IC 4200,4400,4600,4700		ICC1-AVR
	IC 4202,4402,4602,4702		UPC4570G2-A
	IC 4203,4403,4603,4703		NJM4565MD
	IC 4204,4404,4604,4704		NJM12904V
⚠	IC 4501,4601,4701		ICC3-AVR
⚠	IC 4900		NJM1431AU
	Q 4000,4002,4003		RT1N241M
	Q 4001,4111,4211,4311		2SA1602A
	Q 4004,4006,4008,4010		RT1P241M
	Q 4005,4007,4009,4011		RT1N140M
	Q 4012,4013		RT3AMMM
	Q 4014,4016		HN1C01FU
	Q 4015,4109,4209,4309		2SC4154
⚠	Q 4100,4101,4200,4201		PHB45NQ15T
	Q 4102,4104,4202,4204		2SC5738
	Q 4103,4105,4203,4205		2SA2061
	Q 4106,4107,4206,4207		2SA1682
	Q 4108,4208,4308,4408		2SD2704K
	Q 4110,4210,4310,4410		2SA1514K
	Q 4112,4312,4512,4712		RT1N140M
⚠	Q 4300,4301,4400,4401		PHB45NQ15T
	Q 4302,4304,4402,4404		2SC5738
	Q 4303,4305,4403,4405		2SA2061
	Q 4306,4307,4406,4407		2SA1682
	Q 4409,4509,4609,4709		2SC4154
	Q 4411,4511,4611,4711		2SA1602A

Mark	No.	Description	Part No.
⚠ Q	4500,4501,4600,4601		PHB45NQ15T
Q	4502,4504,4602,4604		2SC5738
Q	4503,4505,4603,4605		2SA2061
Q	4506,4507,4606,4607		2SA1682
Q	4508,4608,4708		2SD2704K
Q	4510,4610,4710		2SA1514K
⚠ Q	4700,4701		PHB45NQ15T
Q	4702,4704		2SC5738
Q	4703,4705		2SA2061
Q	4706,4707		2SA1682
D	4001-4005,4007-4014		1SS352
D	4100,4200,4300,4400		1SS302
D	4101,4102,4201,4202		RB161VA-20
D	4103-4107,4203-4207		RF051VA2S
D	4108,4109,4208,4209		RF101L2S
D	4110,4210,4310,4410		1SS352
D	4301,4302,4401,4402		RB161VA-20
D	4303-4307,4403-4407		RF051VA2S
D	4308,4309,4408,4409		RF101L2S
D	4500,4600,4700		1SS302
D	4501,4502,4601,4602		RB161VA-20
D	4503-4507,4603-4607		RF051VA2S
D	4508,4509,4608,4609		RF101L2S
D	4510,4610,4710,4810		1SS352
D	4701,4702		RB161VA-20
D	4703-4707		RF051VA2S
D	4708,4709		RF101L2S

MISCELLANEOUS

L	4100,4200,4300,4400	COIL	ATL7017
L	4101,4201,4301	COMMON MODE COIL	ATL7022
L	4102,4103,4202,4203	INDUCTOR	ATL7018
L	4104,4204,4304	CHIP INDUCTOR	ATL7020
L	4302,4303,4402,4403	INDUCTOR	ATL7018
L	4401,4501,4601	COMMON MODE COIL	ATL7022
L	4404,4504,4604	CHIP INDUCTOR	ATL7020
L	4500,4600,4700	COIL	ATL7017
L	4502,4503,4602,4603	INDUCTOR	ATL7018
L	4701	COMMON MODE COIL	ATL7022
L	4702,4703	INDUCTOR	ATL7018
L	4704	CHIP INDUCTOR	ATL7020
L	4902,4903	CHIP COIL	ATL7016
JA	4101	SP TERMINAL 6-P(V0)	AKE7138
JA	4301,4501	SP TERMINAL 4-P(V0)	AKE7136
KN	4100,4200,4300,4400	SCREW PLATE	VNE1948
RY	4100,4300,4500,4700	RELAY	ASR7001
CN	4000	CONNECTOR	CKS3382
CN	4100,4200,4400,4500	CONNECTOR	CKS1716
CN	4300,4600,4700	5P PLUG	XKP3062
CN	4900	4P-TOP POST(VH)	B4P-VH
CN	4901	PLUG(2P)	KM200NA2
CN	4902	PLUG(4P)	KM200NA4
CN	4903	PLUG(6P)	KM200NA6
	4100,4200,4300,4400,4500,4600,4700	COIL SHIELD 60(MTL)	ANK7139

RESISTORS

Mark	No.	Description	Part No.
R	4057		RS1/8SQ471J
R	4060,4139,4239,4339		RS1/16S5602F
R	4061		RS1/16S3302F
R	4100,4101,4200,4201		RN1/16SE1000D
R	4102,4103,4202,4203		RN1/16SE9100D
R	4104,4105,4204,4205		RN1/16SE1001D
R	4123,4125,4167,4223		RS1/16S1001F
R	4124,4224,4324,4424		RS1/16S2702F
R	4126,4127,4226,4227		RS1/16S1501F
R	4128,4228,4328,4428		RS1/10S2702F
R	4129,4229,4329,4429		RS1/8SQ1R0J
R	4130,4230,4330,4430		RS1/8SQ4702F
R	4131,4231,4331,4431		RS1/8SQ6802F
R	4132,4232,4332,4432		RS1/16S1802F
R	4133,4135,4156,4176		RS1/16S1801F
R	4134,4234,4334,4434		RS1/16S1201F
R	4136,4236,4336,4436		RS1/16S1502F
R	4137,4237,4337,4437		RS1/4SA2702F
R	4138,4238,4338,4438		RS1/16S2701F
R	4145,4150,4245,4250		RS1/10S1002F
R	4146,4246,4346,4446		RS1/16S3902F
R	4147-4149,4161,4162		ACN7165
R	4151,4152,4251,4252		ACN7162
R	4153,4253,4353,4453		RS1/10S334J
R	4154,4254,4354,4454		ACN7161
R	4155,4255,4355,4455		RS1/10S1502F
R	4163,4263,4363,4463		RS1/4SA1053F
R	4164,4264,4364,4464		RS1/16S3301F
R	4166,4266,4366,4466		RS1/16S1002F
R	4168,4268,4368,4468		RS1/16S2202F
R	4169,4269,4369,4469		RS1/16S1202F
R	4177,4277,4377,4477		RS1/4SA2002F
R	4225,4267,4323,4325		RS1/16S1001F
R	4233,4235,4256,4276		RS1/16S1801F
R	4247-4249,4261,4262		ACN7165
R	4300,4301,4400,4401		RN1/16SE1000D
R	4302,4303,4402,4403		RN1/16SE9100D
R	4304,4305,4404,4405		RN1/16SE1001D
R	4326,4327,4426,4427		RS1/16S1501F
R	4333,4335,4356,4376		RS1/16S1801F
R	4345,4350,4445,4450		RS1/10S1002F
R	4347-4349,4361,4362		ACN7165
R	4351,4352,4451,4452		ACN7162
R	4367,4423,4425,4467		RS1/16S1001F
R	4433,4435,4456,4476		RS1/16S1801F
R	4439,4539,4639,4739		RS1/16S5602F
R	4447-4449,4461,4462		ACN7165
R	4500,4501,4600,4601		RN1/16SE1000D
R	4502,4503,4602,4603		RN1/16SE9100D
R	4504,4505,4604,4605		RN1/16SE1001D
R	4523,4525,4567,4623		RS1/16S1001F
R	4524,4624,4724		RS1/16S2702F
R	4526,4527,4626,4627		RS1/16S1501F
R	4528,4628,4728		RS1/10S2702F
R	4529,4629,4729		RS1/8SQ1R0J
R	4530,4630,4730		RS1/8SQ4702F
R	4531,4631,4731		RS1/8SQ6802F
R	4532,4632,4732		RS1/16S1802F
R	4533,4535,4556,4576		RS1/16S1801F
R	4534,4634,4734		RS1/16S1201F
R	4536,4636,4736		RS1/16S1502F
R	4537,4637,4737		RS1/4SA2702F
R	4538,4638,4738		RS1/16S2701F
R	4545,4550,4645,4650		RS1/10S1002F

Mark	No. Description	Part No.
R	4546,4646,4746	RS1/16S3902F
R	4547-4549,4561,4562	ACN7165
R	4551,4552,4651,4652	ACN7162
R	4553,4653,4753	RS1/10S334J
R	4554,4654,4754	ACN7161
R	4555,4655,4755	RS1/10S1502F
R	4563,4663,4763,4863	RS1/4SA1053F
R	4564,4664,4764,4864	RS1/16S3301F
R	4566,4666,4766,4900	RS1/16S1002F
R	4568,4668,4768	RS1/16S2202F
R	4569,4669,4769	RS1/16S1202F
R	4577,4677,4777	RS1/4SA2002F
R	4625,4667,4723,4725	RS1/16S1001F
R	4633,4635,4656,4676	RS1/16S1801F
R	4647-4649,4661,4662	ACN7165
R	4700,4701	RN1/16SE1000D
R	4702,4703	RN1/16SE9100D
R	4704,4705	RN1/16SE1001D
R	4726,4727	RS1/16S1501F
R	4733,4735,4756,4776	RS1/16S1801F
R	4745,4750	RS1/10S1002F
R	4747-4749,4761,4762	ACN7165
R	4751,4752	ACN7162
R	4767	RS1/16S1001F
R	4901	RS1/16S3301F
R	4902	RS2LMF682J
Other Resistors		RS1/16S###J

CAPACITORS

Mark	No. Description	Part No.
C	4001-4004,4011-4021	CCSRCH102J25
C	4005,4006,4026,4027	CKSRYB104K16
C	4010,4036,4916,4917	CEHAT331M10
C	4022,4025,4029,4040	CKSRYB105K10
C	4023	CKSYB106K10
C	4024	CEHAT101M10
C	4028,4926	CKSRYB103K25
C	4031-4035,4041,4121	CKSRYB104K16
C	4100,4200,4300,4400	CFTNA104J2A
C	4101,4201,4301,4401	CFTNA274J2A
C	4104,4105,4204,4205	ACG7069
C	4106,4107,4206,4207	ACG7072
C	4108,4208,4308,4408	CEHAT221M25
C	4109,4209,4309,4409	CFHXSQ103J16
C	4112,4113,4117,4212	ACH1479
C	4114,4214,4314,4414	ACG7068
C	4115,4118,4120,4130	CKSRYB105K10
C	4116,4151,4216,4251	CKSRYB105K16
C	4119,4219,4319,4419	CKSQYB474K16
C	4122,4128,4222,4228	ACG7073
C	4123,4223,4323,4423	ACG7066
C	4124,4224,4324,4424	ACG7078
C	4125,4225,4325,4425	ACG7071
C	4126,4226,4326,4426	ACG7079
C	4127,4227,4327,4427	ACG7070
C	4129,4152,4153,4156	CKSRYB104K16
C	4131,4132,4231,4232	CKSQYB224K25
C	4133,4233,4333,4433	ACG7064
C	4134,4234,4334,4434	ACG7063
C	4135-4138,4235-4238	ACG7065

Mark	No. Description	Part No.
C	4141,4142,4241,4242	CCG1245
C	4143-4146,4243-4246	CCG1248
C	4147,4148,4215,4218	CKSRYB105K10
C	4149,4150,4249,4250	ACH7304
C	4155,4255,4355,4455	CKSYB475K25
C	4157,4257,4357,4457	CKSRYB222K50
C	4160,4260,4360,4460	CCSRCH102J50
C	4213,4217,4312,4313	ACH1479
C	4220,4230,4247,4248	CKSRYB105K10
C	4221,4229,4252,4253	CKSRYB104K16
C	4258,4321,4329,4352	CKSRYB104K16
C	4304,4305,4404,4405	ACG7069
C	4306,4307,4406,4407	ACG7072
C	4315,4318,4320,4330	CKSRYB105K10
C	4316,4351,4416,4451	CKSRYB105K16
C	4317,4412,4413,4417	ACH1479
C	4322,4328,4422,4428	ACG7073
C	4331,4332,4431,4432	CKSQYB224K25
C	4335-4338,4435-4438	ACG7065
C	4341,4342,4441,4442	CCG1245
C	4343-4346,4443-4446	CCG1248
C	4347,4348,4415,4418	CKSRYB105K10
C	4349,4350,4449,4450	ACH7304
C	4353,4356,4421,4429	CKSRYB104K16
C	4420,4430,4447,4448	CKSRYB105K10
C	4452,4453,4458,4521	CKSRYB104K16
C	4500,4600,4700	CFTNA104J2A
C	4501,4601,4701	CFTNA274J2A
C	4504,4505,4604,4605	ACG7069
C	4506,4507,4606,4607	ACG7072
C	4508,4608,4708,4808	CEHAT221M25
C	4509,4609,4709,4809	CFHXSQ103J16
C	4512,4513,4517,4612	ACH1479
C	4514,4614,4714	ACG7068
C	4515,4518,4520,4530	CKSRYB105K10
C	4516,4551,4616,4651	CKSRYB105K16
C	4519,4619,4719	CKSQYB474K16
C	4522,4528,4622,4628	ACG7073
C	4523,4623,4723	ACG7066
C	4524,4624,4724	ACG7078
C	4525,4625,4725	ACG7071
C	4526,4626,4726	ACG7079
C	4527,4627,4727	ACG7070
C	4529,4552,4553,4556	CKSRYB104K16
C	4531,4532,4631,4632	CKSQYB224K25
C	4533,4633,4733	ACG7064
C	4534,4634,4734	ACG7063
C	4535-4538,4635-4638	ACG7065
C	4541,4542,4641,4642	CCG1245
C	4543-4546,4643-4646	CCG1248
C	4547,4548,4615,4618	CKSRYB105K10
C	4549,4550,4649,4650	ACH7304
C	4555,4655,4755	CKSYB475K25
C	4557,4657,4757,4857	CKSRYB222K50
C	4560,4660,4760,4860	CCSRCH102J50
C	4613,4617,4712,4713	ACH1479
C	4620,4630,4647,4648	CKSRYB105K10
C	4621,4629,4652,4653	CKSRYB104K16
C	4658,4721,4729,4752	CKSRYB104K16
C	4704,4705	ACG7069

Mark	No.	Description	Part No.
C	4706,4707		ACG7072
C	4715,4718,4720,4730		CKSRYB105K10
C	4716,4751,4912,4913		CKSRYB105K16
C	4717,4817		ACH1479
C	4722,4728		ACG7073
C	4731,4732		CKSQYB224K25
C	4735-4738		ACG7065
C	4741,4742,4927-4929		CCG1245
C	4743-4746		CCG1248
C	4747,4748,4818,4847		CKSRYB105K10
C	4749,4750		ACH7304
C	4753,4756,4758		CKSRYB104K16
C	4900-4905		ACH7305
C	4908		CEHAT221M25
C	4909,4924,4925		CKSRYB104K25
C	4914,4915		CKSQYB104K16
C	4920,4921		CKSQYB105K25
C	4930,4931		CCSRCH102J50

R ICE SHIELD ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
KN	6990	SCREW PLATE	VNE1948
JH	6990	4P JUMPER CONNECTOR	52147-0410

S ZOUT ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
Q	6401,6411		IMX25

MISCELLANEOUS

Mark	No.	Description	Part No.
JA	6401	PIN JACK(4P)	XKB3017
CN	6401	11P CONNECTOR	52044-1145

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
C	6401,6402,6411,6412		CCSRCH471J50
C	6421,6423		CKSRYB103K50

T PRIMARY ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠ IC	8711		NJM78M56FA
Q	8712		RT1N431M
D	8703,8704,8719		1SS352
⚠ D	8711		S1WB(A)60SD
D	8717		1SS357
D	8718		UDZS5R1(B)

MISCELLANEOUS

Mark	No.	Description	Part No.
⚠ L	8701	LINE FILTER	XTF3004
H	8701,8702	FUSE CLIP	AKR7001
⚠ JA	8701	AC INLET ASSY	ADX7464
KN	8701	WRAPPING TERMINAL	VNF1084
KN	8702,8703	SCREW PLATE	VNE1948
⚠ RY	8702	POWER RELAY	ASR7022
⚠ T	8701	STANDBY TRANSFORMER	ATT7040
⚠ CN	8702	CONNECTOR(VH)	B3P5-VH
CN	8711	PLUG(5P)	KM200NA5
JH	8701	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
R	8702		RD1/4MUF220J
	Other Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
⚠ C	8701,8702		ACE7013
⚠ C	8704		ACG7039
C	8711		CFTLA103J50
C	8712-8715,8720		CCSRCH102J50
C	8716		CEAT332M25
C	8717,8719		CKSRYB103K50
C	8718		CEAT221M25

U PRIMARY GUARD ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
CN	5752	5P PLUG	XKP3062

V REG ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠ IC	7501,7611		NJM78M12FA
⚠ IC	7502		NJM79M12FA
⚠ IC	7521		NJM78M06FA
⚠ IC	7601		NJM78M56FA
⚠ IC	7602		NJM79M05FA
⚠ D	7501-7504,7521,7522		1SR154-400
D	7505,7506,7523,7603		1SS357
⚠ D	7601		D3SBA20(B)
D	7602		1SS352
D	7604,7614		1SS357
⚠ D	7611,7612,7621-7623		1SR154-400
D	7613		1SR154-400
D	7624		HZU6R2(B2)
D	7625		PTZ24(B)

MISCELLANEOUS

Mark	No.	Description	Part No.
H	7501-7504,7601-7604	FUSE CLIP	AKR7001
CN	7501,7601	5P TOP POST	B5B-EH
CN	7502	PLUG(5P)	KM200NA5R
CN	7602	PLUG(5P)	KM200NA5E
CN	7621	PLUG(6P)	KM200NA6
JH	7502,7601	PCB BINDER	VEF1040
⚠ P	7521,7522	PROTECTOR(1A)	AEK7009

RESISTORS

Mark	No.	Description	Part No.
R	7621		RS1/16S473J
⚠	Other Resistors		RD1/4MUF###J

CAPACITORS

Mark	No.	Description	Part No.
C	7500,7520,7600,7634		CFTLA394J50
C	7501		CEAT332M25
C	7502,7521		CEAT222M25
C	7505,7506,7522,7603		CKSRYB103K50
C	7507,7508		CEAT221M25
C	7523		CEAT221M16
C	7601		CEAT472M16
C	7602		CEAT222M16
C	7604,7613,7626		CKSRYB103K50
C	7605,7606,7624		CEAT101M16

Mark	No.	Description	Part No.
	C 7611		CEAT102M35
	C 7612		CEAT471M35
	C 7614		CEAT100M50
	C 7621		CEANP101M35
	C 7622		CEAT101M35
	C 7623		CEAT221M35
	C 7625		CEAT470M50
	C 7628,7632		CCSRCH102J50
	C 7629		CFTLA104J50

W ICE REG ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC 7251		NJM78M12FA
⚠	IC 7252		NJM79M12FA
⚠	IC 7271		NJM78M05FA
⚠	IC 7272		NJM79M05FA
⚠	Q 7201		RSQ035P03
⚠	Q 7202		RSQ035N03
	Q 7203,7204		RT1N431M
	Q 7205,7222		RT1P431M
⚠	Q 7211		2SD1763A
⚠	Q 7212		2SB1186A
	Q 7221		RT1N241M
	Q 7241		2SD1763A
	Q 7242		2SC4154
⚠	D 7201-7204,7211,7212		1SR154-400
	D 7205,7206,7245		1SS352
	D 7213,7214		HZU7R5(B1)
	D 7215,7216		1SR154-400
⚠	D 7241-7244,7251-7254		1SR154-400
	D 7247		UDZS12(B)
⚠	D 7248		PTZ15(B)
⚠	D 7249		HZU12(B2)
	D 7255,7256,7275,7276		1SS357
⚠	D 7271-7274		1SR154-400

MISCELLANEOUS

Mark	No.	Description	Part No.
	H 7201-7204,7241,7242	FUSE CLIP	AKR7001
	H 7251-7254	FUSE CLIP	AKR7001
	CN 7201	8P TOP POST	B8B-EH
	CN 7241	PLUG(2P)	KM200NA2
	CN 7251	PLUG(6P)	KM200NA6E
	CN 7271	PLUG(4P)	KM200NA4
	CN 7302	PLUG(6P)	KM200NA6R
	JH 7251-7253	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
	R 7211,7213		RD1/4MUF102J
	R 7241		RS1/4S152J
	R 7255,7256		RS1/10S0R0J
	Other Resistors		RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
	C 7200,7240,7250,7270		CFTLA394J50
	C 7201,7202		CEAT102M16
	C 7211-7215,7219,7245		CEAT100M50
	C 7217,7218,7242,7253		CKSRYB103K50
	C 7221,7246		CEAT470M25
	C 7241,7251,7252		CEAT222M25
	C 7254,7273,7274		CKSRYB103K50
	C 7255,7256		CEAT221M25
	C 7271,7272		CEAT222M16
	C 7275,7276		CEAT221M16
	C 7277,7278		CCSRCH102J50

X B DIODE ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	D 7400,7401		LN6SB60-4003

MISCELLANEOUS

Mark	No.	Description	Part No.
	CN 7400	CONNECTOR	B3P-VH
	7400,7401	HEAT SINK B	ANH1021
	7402,7403	SCREW	IBZ30P080FCC
	JP 7401	3P HOUSING ASSY	ADX7649

RESISTORS

Mark	No.	Description	Part No.
	R 7402		RD1/4MUF100J
	Other Resistors		RS1/4SA###J

CAPACITORS

Mark	No.	Description	Part No.
	C 7400,7401		ACH7270
	C 7402,7403		CFTLA104J2A

Y B REG ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC 7300,7301		HA17431GLTPA
⚠	IC 7302,7303		NJM2746V
⚠	Q 7300		2SD2083(Y)
⚠	Q 7301		2SB1383(Y)
	Q 7302,7308		2SD1857
	Q 7303,7307		2SB1236
	Q 7304		RT1N241M
	Q 7306		RT1P241M
	Q 7309		2SC4154
	Q 7310		2SA1602A
	D 7302,7303		PTZ11(B)
	D 7304,7307		UDZS2R4(B)
	D 7306,7309,7350,7352		1SS352
	D 7308,7310		1SR154-400
	D 7351		UDZS18(B)
	D 7353		UDZS20(B)
	D 7355		1SS352
⚠	TH 7300		PTFM04BB222Q2N34B0

MISCELLANEOUS

Mark	No.	Description	Part No.
	H 7300-7303	FUSE CLIP	AKR7001
	CN 7303	4P-TOP POST(VH)	B4P-VH
	CN 7306	PLUG(4P)	KM200NA4
	CN 7308	CONNECTOR	B3P-VH
	JH 7300	PCB BINDER	VEF1040
⚠	P 7300,7301	PROTECTOR(500MA)	AEK7005

RESISTORS

Mark	No.	Description	Part No.
	R 7302,7303		RS2LMF222J
	R 7306,7307		RS2LMF472J
	R 7308-7311		RS1/4SA333J
	R 7312-7315		RN1/16SE2702D
	R 7318,7319		RS1/10S473J
	R 7322,7323		RS2LMF152J
	R 7324,7325		RS1/10S100J
	R 7326-7329		RS1LMF332J
	R 7332,7333		RN1/10SE8202D

Mark	No.	Description	Part No.
R	7334,7335		RN1/10SE6801D
R	7336,7337		RN1/10SE1800D
R	7386		RS1/4SA154J
R	7387		RS1/4SA393J
R	7388		RS1/4SA223J
R	7389		RS1/4SA473J
Other Resistors			RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
C	7302,7303,7376-7379		CCSRCH102J50
C	7304-7307,7350		CKSRYB104K50
C	7310,7311		CKSRYB473K50
C	7318,7319		CCG1248
C	7320,7321		CEAT4R7M50
C	7324,7325		CEHAT470M2A
C	7326,7327		ACG7064
C	7380-7384		CKSRYB104K50
C	7386		CCSRCH102J50

Z DCDC ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠ IC	3901		PQ1CG3032FZ
D	3901		RB050L-40
⚠ D	3902		PTZ6R8(B)

MISCELLANEOUS

Mark	No.	Description	Part No.
L	3901	INDUCTOR	ATH7052
CN	3901	CONNECTOR	B2B-EH-E
CN	3902	CONNRCTOR	B2B-EH-Y
	3900	HEAT SINK	ANH-309
	3901	SCREW	BBZ30P080FCC
JH	3901	PCB BINDER	VEF1040

RESISTORS

Mark	No.	Description	Part No.
R	3901		RN1/16SE1001D
R	3902		RN1/16SE3301D
Other Resistors			RS1/16S###J

CAPACITORS

Mark	No.	Description	Part No.
C	3901		CEHAZL471M25
C	3902		CKSYB105K25
C	3903		CKSRYB104K25
C	3905		CEHAZL221M10
C	3906,3910		CCSRCH102J50
C	3911		CFTLA394J50

AA HDMI RECT ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠ D	8801		D5SBA20(B)

MISCELLANEOUS

Mark	No.	Description	Part No.
H	8801,8802	FUSE CLIP	AKR7001
CN	8801	3P TOP POST	B3B-EH
CN	8802	CONNECTOR	B2B-EH-R

CAPACITORS

Mark	No.	Description	Part No.
C	8800		CFTLA274J50
C	8801		ACH7286
C	8803		CCSRCH102J50

Mark No. Description Part No.

FM/AM TUNER UNIT

FM/AM TUNER UNIT has no service parts.